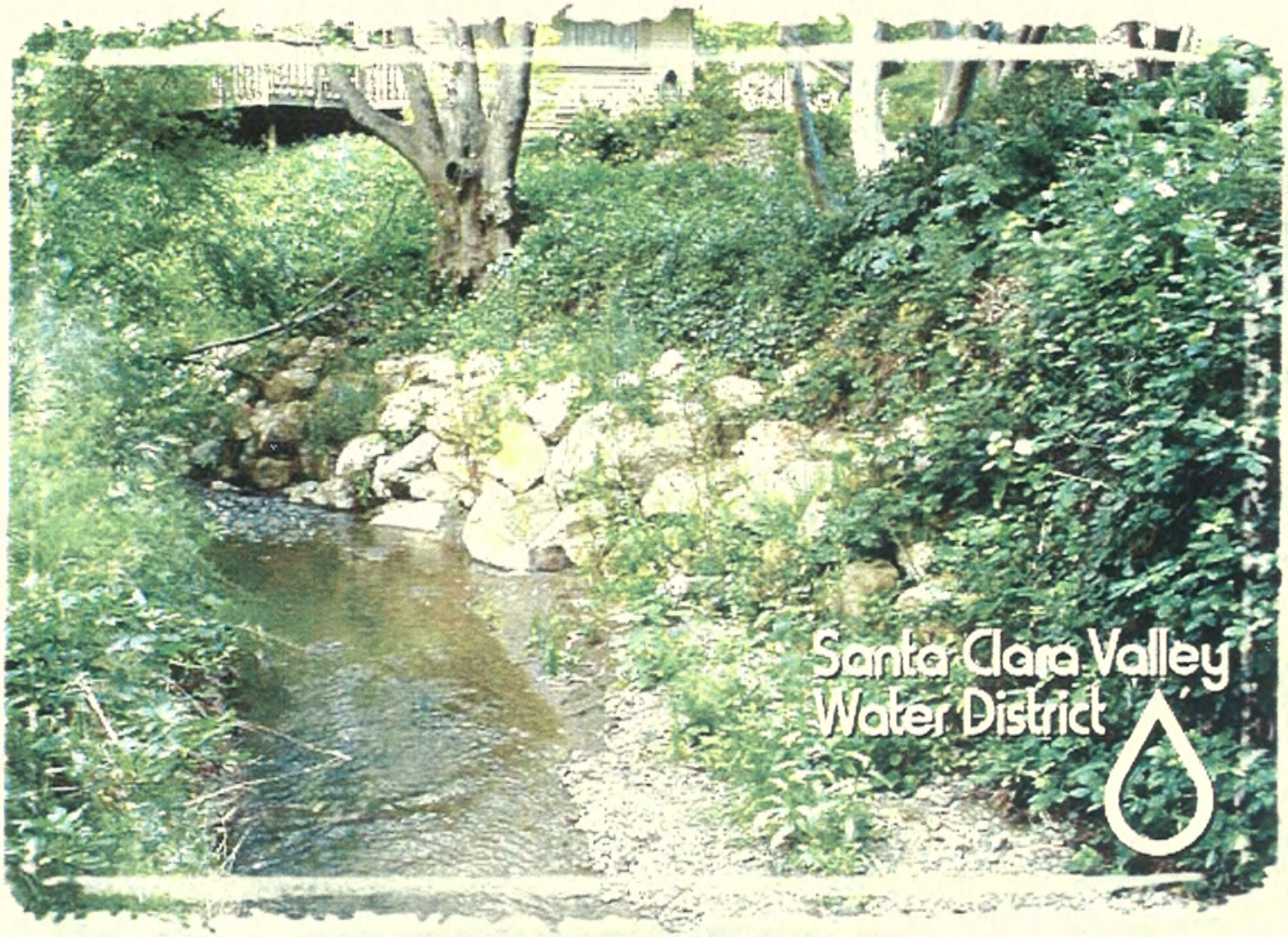
2001 Stream Maintenance Project

Final Initial Study and Mitigated Negative Declaration

JULY 2001



DISTRICT BOARD OF DIRECTORS

Rosemary C. Kamei, Vice Chair	District 1	Gregory A. Zlotnick	District 5
Joe Judge	District 2	Tony Estremera, Chair	At Large
Richard Santos	District 3	Sig Sanchez	At Large
Larry Wilson	District 4		

Santa Clara Valley
Water District

5750 ALMADEN EXPWY
SAN JOSE, CA 95118-3686
TELEPHONE (408) 265-2600
FACIMILE (408) 266-0271
www.scvwd.dst.ca.us
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NOTICE OF
DRAFT ENVIRONMENTAL IMPACT REPORT AVAILABILITY

Project Title: Multi-Year Stream Maintenance Program

Project Location: The project area covers streams, water delivery canals, and adjacent properties in Santa Clara County that the Santa Clara Valley Water District (District) owns or holds an easement for access and maintenance. Routine maintenance activities are projected to occur in or along approximately 240 miles of streams and 29 miles of canals.

Description of Nature, Purpose, and Benefits of Project:

The District is the public agency responsible for flood protection and stream stewardship projects countywide. The proposed SMP allows the District to continue preserving the existing level of flood protection of streams and water delivery function of canals in the county. For flood protection, all creeks in Santa Clara County with a watershed greater than 320 acres are in the District's jurisdiction.

Major routine maintenance activities to maintain the conveyance capacity of county streams and canals include: removal of sediment, removal of vegetation growth, and repair of erosion sites within and along streams and canals. Other minor routine maintenance activities include maintenance of vegetation sites, fence repair, trash removal, and removal of downed trees or other blockages from streams. Routine maintenance activities under the SMP will preserve the flood protection for approximately 86,765 parcels (approximately 31,645 acres) in Santa Clara County including:

- 77, 262 residential parcels (11,900 acres)
- 2,733 high-density residential parcels (1,612 acres)
- 432 public parcels (674 acres)
- 2,624 commercial parcels (3,206 acres)
- 1,796 industrial parcels (6,158 acres)
- 358 agricultural parcels (4,574 acres)
- 1,560 vacant and open space parcels (3,521 acres)

Potentially Significant Impacts: After implementation of the Best Management Practices (BMPs) and compensatory mitigation measures, the localized fragmentation of wildlife habitat, with loss of habitat area, quality, and connectivity remains significant and unavoidable. Resuming herbicide use in the Pajaro River Basin (South Santa Clara County) has the potential for either a reduction or change in type of vegetation in the Pajaro River Basin. Installation of hardscape designs for bank protection has the potential for reducing riparian vegetation and fragmenting wildlife habitat.

Addresses Where Copies of Draft EIR are Available: Copies of the Draft EIR and Stream Maintenance Program (SMP) Report are available for inspection and review at:

- Santa Clara Valley Water District, 5700 Almaden Expressway, San Jose
- Saratoga Community Library, 13650 Saratoga Avenue, Saratoga
- Dr. Martin Luther King, Jr. Library, 180 West San Carlos Street, San Jose
- Santa Clara City Library, 2635 Homestead Road, Santa Clara
- Evergreen Branch Library, 2635 Aborn Road, San Jose
- Milpitas Community Library, 40 N. Milpitas Boulevard, Milpitas
- Alviso Public Library, 5050 North First Street, Alviso
- Sunnyvale Public Library, 665 W. Olive Avenue, Sunnyvale
- Almaden Branch Library, 6455 Camden Avenue, San Jose
- Cupertino Public Library, 10400 Torre Avenue, Cupertino
- Morgan Hill Public Library, 17575 Peak Avenue, Morgan Hill
- Mountain View Public Library, 585 Franklin Street, Mountain View
- Gilroy Public Library, 7387 Rosanna Street, Gilroy
- Los Altos Community Library, 13 S. San Antonio Road, Los Altos
- Los Gatos Public Library, 110 E. Main Street, Los Gatos
- Palo Alto Public Library, 1213 Newell Road, Palo Alto
- Campbell Public Library, 77 Harrison Avenue, Campbell
- Santa Clara County Library, 1095 N. 7th Street, San Jose

Public Review Period: The Draft EIR and SMP report are available for public comment from March 29, 2001 to May 14, 2001. Written comments on the DEIR and SMP Report must be submitted by 5:00 p.m. on May 14, 2001, to: Santa Clara Valley Water District, Attention Ms. Cindy Roessler, 5750 Almaden Expressway, San Jose, CA 95118. Phone: (408) 265-2607, extension 2765. E-mail: CindRoes@scvwd.dst.ca.us.

Contact Person: To obtain additional information related to the Draft EIR and SMP Report, interested persons are invited to contact: Ms. Cindy Roessler, Project Manager, Santa Clara Valley Water District, 5750 Almaden Expressway, San Jose, Phone: (408) 265-2607, extension 2765, E-mail: CindRoes@scvwd.dst.ca.us.

Comments received in response to the Draft EIR and SMP Report, including names and addresses of those who comment, will be considered part of the public record on this proposed project and will be available for public inspection. Comments submitted anonymously will be accepted and considered pursuant to 7 CFR 1.27(d). Any person may request the District to withhold a submission from the public record by showing how the Freedom of Information Act (FOIA) permits such confidentiality. Persons requesting such confidentiality should be aware that, under FOIA, confidentiality may be granted in only very limited circumstances such as to protect trade secrets. The District will inform the requester of the its decision regarding the request for confidentiality, and where the request is denied, the District will return the submission and notify the requester that the comments may be resubmitted with or without the name and address.

Stanley M. Williams
Chief Executive Officer
Santa Clara Valley Water District

3/28/2001
Date

Santa Clara Valley
Water District

LIBRARY

Meeting Date: 7/3/01
Agenda Item No.: 12
Manager: J. Fiedler
Extension: 2736

BOARD AGENDA MEMO

☐ Discussion ☒ Action ☐ Consent ☐ Information

SUBJECT: 2001 Stream Maintenance Project—Initial Study and Mitigated Negative Declaration

RECOMMENDED ACTIONS:

That the Board:

1. Approve the 2001 Stream Maintenance Project;
2. Find on the basis of the whole record before the Board including the Final Initial Study, all comments received and staff's responses to the comments, that there is not any substantial evidence that the project will have a significant effect on the environment, and that the Mitigated Negative Declaration (MND) reflects the District's independent judgment and analysis;
3. Adopt the 2001 Stream Maintenance Project Final Initial Study and MND in accordance with the California Environmental Quality Act, of which the lead agency is the District, located at 5750 Almaden Expressway, San Jose, CA 95118-3686; and
4. Direct the Clerk of the Board to file a Notice of Determination with the County Clerk and the Office of Planning and Research.

RATIONALE:

This item is being brought to the Board for approval in accordance with CEQA as noted in item No. 3 above and Board Ends Policies 1.2 and 2.1.1.1 and 2 which states:

> 1.2 There is reduced potential for flood damages.
>
> 2.1.1.1 Mitigation for the adverse impacts of District activities are identified.

FINANCIAL IMPACT:

Project Costs

The estimated costs to remove the 90,310 cubic yards of sediment and complete the 9,965 linear feet of erosion repair is $3,840,000 and will depend on site conditions and sediment

APPROVED JUL 03 2001

disposal costs at the time the work is performed. Funds have been budgeted in the fiscal year (FY) 01-02 budget. The estimated costs to each Flood Control Zone is:

Zone	Cost	% of Total
Northwest Zone Fund	$ 662,000	(17%)
North Central Zone Fund	$ 780,000	(20%)
Central Zone Fund	$1,000,000	(26%)
East Zone Fund	$1,330,000	(35%)
South Zone Fund	$ 70,000	(2%)

Mitigation Costs

Mitigation costs for 1.85 acres of tidal wetland compensation at the Pond A-4 site is estimated to be $244,000 and 1.98 acres of nontidal wetland compensation at the Los Capitancillos and Coyote Parkway sites is estimated to be $1,188,000.

Santa Clara Valley
Water District

Meeting Date: 7/3/01
Agenda Item No.: 12
Manager: J. Fiedler
Extension: 2736

STAFF REPORT

SUBJECT: 2001 Stream Maintenance Project—Initial Study and Mitigated Negative Declaration

PROJECT SUMMARY:

The goals of the 2001 Stream Maintenance Project (Project) consist of:

1. Restoring flood control capacity in improved channels by removing accumulated sediment to meet the requirements of the Federal Emergency Management Agency (FEMA), the U.S. Army Corps of Engineers, or the Natural Resources Conservation Service, or;

2. Restoring banks and levees to the preerosion footprint and shape.

The Project consists of **17 sediment removal** projects totaling an estimated 90,310 cubic yards of sediment from flood management channels throughout the five Flood Control Zones.

The sediment projects along with the estimated sediment to be removed included in the Initial Study/Mitigated Negative Declaration (IS/MND) are presented in Table 1. A summary of the approximate amount of sediment to be removed in each watershed is provided below:

Lower Peninsula Watershed	5,000 cubic yards
West Valley Watershed	30,000 cubic yards
Guadalupe Watershed	12,050 cubic yards
Coyote Watershed	43,230 cubic yards
Uvas/Llagas Watershed	30 cubic yards

The Project also includes **15 bank stabilization** (erosion repair) projects along approximately 9,965 linear feet (1.9 miles) of levees and channels in all five Flood Control Zones. The projects along with the estimated length of levee or channel to be stabilized or repaired are presented in Table 2. A summary of the approximate amount of work in linear feet in each watershed is provided below:

Lower Peninsula Watershed	100 linear feet
West Valley Watershed	880 linear feet
Guadalupe Watershed	1220 linear feet
Coyote Watershed	665 linear feet
Uvas/Llagas Watershed	7100 linear feet

STAFF ANALYSIS:

The draft 2001 Project IS/MND was prepared in accordance with California Environmental Quality Act (CEQA) requirements to examine the project for potential impacts and to address the impacts that were revealed by the study. With the Chief Executive Officer's approval, the draft IS/MND was circulated for public review and comment from May 3, 2001 to June 4, 2001. Written comments were received from:

1. Department of Transportation (Oakland), May 30, 2001
2. Santa Clara County Streams For Tomorrow, June 4, 2001
3. Governor's Office of Planning and Research—State Clearinghouse, June 4, 2001

In response to written comments received, staff has prepared the final IS/MND by either providing responses to the comments or revising the document. Adoption of the MND indicates that the Board has considered the IS/MND together with all of the written comments.

PROJECT IMPACTS:

The IS/MND assessed the project's impacts on geology and soils, hydrology/water quality, plant and animal life, land use/community plans and values, transportation, public health/safety, air quality, noise aesthetics, recreation, and historic/cultural resources. Best management practices and the design features of the project reduce impacts to less-than-significant levels related to water (minimization of turbidity), plant life (protection and revegetation), fish and wildlife (deflection of water flow and timing of work), and cultural resources. However, in recognition of the potential for cumulative impacts to wetlands, compensatory mitigation for tidal and nontidal wetlands is identified in the IS/MND. This compensatory mitigation will be "credited" to the multiyear Stream Maintenance Program by becoming part of that Program's mitigation package.

Potential cumulative impacts to 2.13 acres of tidal wetlands from sediment removal activities will occur from these projects. Of this amount, 0.28 acres of impacts occur at sites that were impacted and mitigated for in 1997 and 1998. Compensatory mitigation is not proposed for repetitive impacts. Therefore, the impacts to tidal wetlands will be compensated with 1.85 acres of wetland creation at the District's Pond A-4 Tidal Wetland Restoration Site (Cargill salt pond A-4).

Potential cumulative impacts to 2.14 acres of nontidal wetlands from sediment removal activities will occur from these projects. Of this amount, 0.16 acres of impacts occur at sites that were impacted and mitigated for in 1997 and 1998. Compensatory mitigation is not proposed for repetitive impacts. Therefore, the impacts to tidal wetlands will be compensated with 0.50 acres of wetland creation at the District's Los Capitancillos Wetland Mitigation site and 1.48 acres of wetlands at the Coyote Creek Parkway Wetland Mitigation site.

Erosion control results in the temporary loss of 0.05 acres of wetlands at two projects in the Uvas/Llagas watershed; this is a less-than significant-impact and no compensatory mitigation is proposed.

NEXT STEPS:

State regulatory agencies require a copy of a final adopted CEQA document before they issue a permit. The Board's adoption of the Project's IS/MND will allow the State regulatory agencies to finish processing our permits.

The Department of Fish and Game (DFG) 1601 Streambed Alternation Agreements (permits) for 12 projects have been processed and are expected to be finalized in the middle to end of July. The 20 remaining projects are covered by a Memorandum of Understanding with DFG and do not need 1601 permits.

The San Francisco Regional Water Quality Control Board (SFRWQCB) has scheduled the Waste Discharge Requirements (WDR Permit) for adoption at their July 18 Board meeting. The WDR Permit will cover all of the sediment removal projects in the Northern Watersheds. The SFRWQCB also will administratively issue a "wavier of waste discharge requirements" (which serve as 401 certifications) for the bank stabilization projects in the Northern Watersheds. The wavier is expected in the first week of August.

The Central Coast Regional Water Quality Control Board (CCRWQCB) has scheduled their Board to adopt a waiver of WDRs for the sediment removal portion of the Rucker Creek project at their July Board meeting. The CCRWQCB also will administratively issue a "wavier of WDRs" (which serves as 401 certifications) for the two bank stabilization projects in the Uvas/Llagas Watershed. The wavier is expected in the first week of August.

The U.S. Army Corps of Engineers has received our application for 404 Nationwide Permits. Nationwide Permits regulate permanent and temporary fill in the waters of the United States. The Nationwide Permits are required for all but two of our projects. The permits are expected to be issued in the first part of August.

Staff anticipates that needed permits will be issued in time for the 2001 Stream Maintenance Projects to begin in the middle of August.

TABLE 1
2001 STREAM MAINTENANCE PROJECTS
Sediment Removal Projects

Project Description	Excavation (cubic yards)	Location
Lower Peninsula Watershed (Northwest Zone)		
Adobe Creek at Highway 101	1,000	Palo Alto
Matadero Creek at Highway 101 to Louis Road	4,000	Palo Alto
West Valley Watershed (North Central Zone)		
Calabazas Creek downstream Highway 101	30,000	Sunnyvale/Santa Clara
Guadalupe Watershed (Central Zone)		
Canoas Creek at Guadalupe Confluence to Cottle Road	1,900	San Jose
Guadalupe River upstream Tasman to Montague	10,000	San Jose/Santa Clara
Randol Creek upstream Bret Harte Avenue	50	San Jose
Ross Creek upstream Cherry Avenue	100	San Jose
Coyote Watershed (East Zone)		
Berryessa Creek at Milpitas Boulevard to Calaveras	5,900	Milpitas
Berryessa Creek at Cropley to Sierra Creek Confluence	2,400	San Jose
Berryessa Creek upstream and downstream Piedmont Road	1,300	San Jose
Los Coches downstream I-680 to Dempsey	1,800	Milpitas
Calera Creek upstream Union Pacific Railroad	600	Milpitas
Calera Creek upstream Escuela Parkway	230	Milpitas
Coyote Creek upstream Lower Penitencia confluence	150	San Jose
Flint Debris Basin upstream Mt. Pleasant Road	30,000	San Jose
Sierra Creek downstream Mauna Keal	850	San Jose
Uvas/Llagas Watershed (South Zone)		
Rucker Creek downstream Guibal Avenue	30	Gilroy
TOTAL	90,310	

TABLE 2
2001 STREAM MAINTENANCE PROJECTS
Bank Stabilization Projects

Project Description	Excavation (linear feet)	Location
Lower Peninsula Watershed (Northwest Zone)		
Matadero Creek at Josina Avenue	100	Palo Alto
West Valley Watershed (North Central Zone)		
Calabazas Creek at Quarry Road	30	Saratoga
Guadalupe Slough at Baylands Park	50	Sunnyvale
San Tomas Creek upstream McCoy Avenue	550	Campbell
Stevens Creek at Clearcreek Court Site A	100	Cupertino
Stevens Creek at Clearcreek Court Site B	100	Cupertino
Stevens Creek at Highway 85	50	Mountain View
Guadalupe Watershed (Central Zone)		
Canoas Creek upstream of Blue Jay Drive	20	San Jose
Canoas Creek upstream of Hillside Avenue	1000	San Jose
Los Gatos Creek upstream Lincoln Avenue	200	Campbell
Coyote Watershed (East Zone)		
Coyote Creek upstream Lower Penitencia confluence	150	Milpitas
Lower Penitencia Creek downstream Redwood Avenue	315	Milpitas
Thompson Creek downstream Pettigrew Court	200	San Jose
Uvas/Llagas Watershed (South Zone)		
East Little Llagas Creek at San Martin Avenue to Church Avenue	7000	Morgan Hill
Rucker Creek downstream Guibal Avenue	100	Gilroy
TOTAL	9,965	

A COPY OF THIS REPORT IS AVAILABLE IN THE DISTRICT LIBRARY

2001 Stream Maintenance Project

Final Initial Study and Mitigated Negative Declaration

JULY 2001

DISTRICT BOARD OF DIRECTORS

Rosemary C. Kamei, Vice Chair	District 1	Gregory A. Zlotnick	District 5
Joe Judge	District 2	Tony Estremera, Chair	At Large
Richard Santos	District 3	Sig Sanchez	At Large
Larry Wilson	District 4		

July 5, 2001

Office of the County Clerk-Recorder
Santa Clara County Superior Court
70 W. Hedding Street, 1st Floor
San Jose, CA

Ladies and Gentlemen:

Subject: 2001 Stream Maintenance Project Initial Study and Mitigated Negative Declaration

Enclosed are the original and two copies of the Notice of Determination for the above project. Also enclosed is an SCVWD check for $1,275.00 ($25.00 for Clerk's fee and $1,250.00 for State filing fee).

Please return one FILE ENDORSED copy of the Notice of Determination in the enclosed self-addressed stamped envelope.

If you have any questions, please call me at 265-2607, ext. 2504. Thank you for your assistance in this matter.

Sincerely,

ORIGINAL SIGNED BY

Marcia J. Guzzetta
Board Administrative Assistant

Enclosures

bcc: L. Keller
J. Christie (w/enc)
M. Dargis (w/enc)
B. Goldie (w/enc)
J. Fiedler (w/enc)
D. Amshoff (w/enc)
Accounting (w/enc)
File (w/enc)

Santa Clara County
Superior Court
Office of the County Clerk

191 North First Street
San Jose, California 95113
(408) 299-2968

*ENVIRONMENTAL DECLARATION

FOR COURT USE ONLY

FILING NO.

NAME OF LEAD AGENCY:
Santa Clara Valley Water District

NAME OF APPLICANT:
Santa Clara Valley Water District
(2001 Stream Maintenance Project)

CLASSIFICATION OF ENVIRONMENTAL DOCUMENT:

1. ( ) NOTICE OF PREPARATION
—NO FEE—

2. ( ) NOTICE OF EXEMPTION/STATEMENT OF EXEMPTION
—NO FEE—

3. NOTICE OF DETERMINATION

(X) A—NEGATIVE DECLARATION PURSUANT TO SECTION 21080(C) OF THE PUBLIC RESOURCES CODE
$1,250.00 (Twelve Hundred Fifty Dollars)—STATE FILING FEE

$25.00 (Twenty-five Dollars)—CLERK FEE

( ) B—CERTIFICATE OF EXEMPTION DE MINIMIS IMPACT FINDING
—NO FEE—

4. NOTICE OF DETERMINATION

( ) A—ENVIRONMENTAL IMPACT REPORT PURSUANT TO SECTION 21152 OF THE PUBLIC RESOURCES CODE
$850.00 (Eight Hundred Fifty Dollars)—STATE FILING FEE

$25.00 (Twenty-Five Dollars)—CLERK FEE

( ) B—CERTIFICATE OF EXEMPTION DE MINIMIS IMPACT FINDING
—NO FEE—

***THIS FORM MUST BE COMPLETED AND FILED WITH ALL ENVIRONMENTAL DOCUMENTS FILED WITH THE SANTA CLARA COUNTY CLERK'S OFFICE.**

MAKE CHECKS PAYABLE TO: COUNTY CLERK

3882 REV 6/91

Notice of Determination

Form C

To: ☑ Office of Planning and Research
PO Box 3044, 1400 Tenth Street, Room 222
Sacramento, CA 95812-3044

☑ County Clerk
County of San Jose
70 West Hedding Street
San Jose, CA 95110

From: (Public Agency)
Santa Clara Valley Water District
5750 Almaden Expy., San Jose CA 95118
(Address)

POSTED ON 7/05/01 THROUGH 8/04/01
IN THE OFFICE OF THE COUNTY CLERK-RECORDER
BRENDA DAVIS, COUNTY CLERK
BY __________ DEPUTY

Subject:

Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

2001 Stream Maintenance Project
Project Title

2001052013	Jason Christie	408-265-2607
State Clearinghouse Number (If submitted to Clearinghouse)	Lead Agency Contact Person	Area Code/Telephone/Extension

Santa Clara County
Project Location (include county)

Project Description:

The project consists of annual stream maintenance activities which includes sediment removal in 17 channel segments and bank stabilization along 15 channel segments.

This is to advise that the Santa Clara Valley Water District (☑ Lead Agency ☐ Responsible Agency) has approved the above described project on July 3, 2001 (Date) and has made the following determinations regarding the above described project:

1. The project [☐ will ☑ will not] have a significant effect on the environment.
2. ☐ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   ☑ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [☑ were ☐ were not] made a condition of the approval of the project.
4. A statement of Overriding Considerations [☐ was ☑ was not] adopted for this project.
5. Findings [☑ were ☐ were not] made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval is available to the General Public at:

	July 3, 2001	Watershed Support Unit Mgr
Signature (Public Agency)	*Date*	*Title*

ENDORSED

Date received for filing at OPR:

JUL 05 2001
BRENDA DAVIS, County Clerk-Recorder
Santa Clara County
By __________ Deputy

E 9492

Revised May 1999

Santa Clara Valley Water District
5750 ALMADEN EXPRESSWAY • SAN JOSE, CALIFORNIA 95118, (408) 265-2600

DATE 7/02/2001

ATTACHED CHECK IS IN RESPONSE TO INVOICES LISTED BELOW

REF# SM2001
FEE FOR COUNTY CLERK

E 9492

Amount
$1,275.00*******

FC 89 8/96

STATEMENT ONLY ——— DO NOT CASH
PLEASE DETACH BEFORE DEPOSITING—BY ENDORSEMENT THE CHECK IS ACCEPTED IN PAYMENT OF ABOVE

Brenda Davis
Santa Clara Co.
Clerk-Recorder

07/05/01 11:53:37

Receipt # 67336
Wrkstn ID W86A
File # X-0000009492

Miscellaneous Fees

Public

Fees	$1,275.00
** TOTAL	1,275.00
Check	1,275.00

#706286

PLEASE KEEP THIS RECEIPT FOR REFERENCE

TC425 S383 S762001fc.1

SANTA CLARA VALLEY WATER DISTRICT
LIBRARY
5750 ALMADEN EXPRESSWAY
SAN JOSE, CALIFORNIA 95118

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SAN JOSE, CALIFORNIA 95118

MITIGATED NEGATIVE DECLARATION

DATE: May 3, 2001

SUBJECT: Mitigated Negative Declaration

Pursuant to the California State Public Resources Code and the California Environmental Quality Act (CEQA) Guidelines, as amended to date, the Santa Clara Valley Water District (District) submits a Mitigated Negative Declaration for the year 2001 Stream Maintenance Project (2001 SMP). Objectives of the 2001 SMP consist of:

1. restoring flood conveyance capacity in improved channels by removing accumulated sediment in accordance with the criteria, standards or guidelines of the Federal Emergency Management Agency (FEMA), the U. S. Army Corps of Engineers (Corps), the Natural Resources Conservation Service (NRCS), or the District; or

2. restoring banks to the pre-erosion footprint and shape and,

3. performing the work in an environmentally sensitive manner.

The 2001 SMP consists of only the activities listed below.

- Sediment Removal: Seventeen sediment removal sites are included in the 2001 SMP, all of which occur within earthen or concrete lined improved channels. Sediment removal site locations are outlined below. A total of approximately 75,310 cubic yards (cy) of sediment is proposed for removal along approximately 67,000 linear feet of channel (approximately 13 miles) as part of the 2001 SMP. Two sites have sediment removal ancillary to erosion repair activities and are included under the Erosion Repair activities: Coyote Creek and Rucker Creek.

  2001 SMP Sediment Removal Sites
  1. Adobe Creek at Highway 101
  2. Berryessa Creek, Milpitas Blvd. to Calaveras Blvd.
  3. Berryessa Creek, Cropley Ave. to Sierra Creek Confluence
  4. Berryessa Creek downstream and upstream of Piedmont Road
  5. Calabazas Creek downstream of Highway 101
  6. Calera Creek, UPRR to Milpitas Blvd.
  7. Calera Creek upstream of Escuela Parkway
  8. Canoas Creek Guadalupe Confluence to Cottle Road
  9. Coyote Creek upstream Lower Penitencia confluence (sediment removal is ancillary to the bank protection)
  10. Flint Debris Basin, upstream of Mount Pleasant Road
  11. Guadalupe River, upstream Tasman to Montague
  12. Los Coches Creek, downstream of Interstate 680 to Dempsey Rd.

13. Matadero Creek, Highway 101 to Louis Road
14. Randol Creek upstream ~~and downstream~~ of Bret Harte Drive
15. Ross Creek upstream ~~and downstream~~ of Cherry Ave.
16. Rucker Creek downstream Guibal Ave. (sediment removal is ancillary to the bank protection)
17. Sierra Creek downstream of Mauna Kea Lane

- Bank Protection (erosion repair): Fifteen bank protection (erosion repair) projects are included in the 2001 SMP with work proposed along approximately 9965 linear feet of channel (approximately 1.9 miles). Bank protection site locations are outlined below.

  2001 SMP Bank Protection Sites

  1. Calabazas Creek at Quarry Road
  2. Canoas Creek upstream of Bluejay Drive
  3. Canoas Creek upstream of Hillsdale Avenue
  4. Coyote Creek upstream Lower Penitencia Confluence
  5. East Little Llagas Creek, San Martin Avenue to Church Avenue
  6. Guadalupe Slough at Baylands
  7. Los Gatos Creek upstream of Lincoln Avenue
  8. Lower Penitencia Creek downstream of Redwood Avenue
  9. Matadero Creek at Josina Avenue
  10. Rucker Creek downstream of Guibal Avenue
  11. San Tomas Creek upstream of McCoy Avenue
  12. Stevens Creek at Clearcreek Court (Site A)
  13. Stevens Creek at Clearcreek Court (Site B)
  14. Stevens Creek at Highway 85
  15. Thompson Creek downstream of Pettigrew Court

FINDINGS

The Santa Clara Valley Water District Board of Directors, having reviewed the Initial Study for the proposed 2001 SMP, consisting of the attached document, finds that:

1. The 2001 SMP will result in removal of ~~1.86~~ 2.13 acres of tidal wetland vegetation and ~~2.45~~ 2.19 acres of nontidal wetland vegetation.

   a. The sediment removal projects impact a total of ~~1.86~~ 2.13 acres of tidal wetland and 2.19 ~~2.40~~ acres of non-tidal wetland, all in the San Francisco Bay watershed. Three of the proposed projects are in areas in which the District conducted sediment removal activities in 1997 or 1998. These "repeat" projects account for ~~0.26~~ 0.27 acres of tidal wetland and 0.16 acres of non-tidal wetland. The District has already provided wetland mitigation for the impacts of those projects and will therefore not provide any mitigation for the repeat projects. Thus, the compensatory mitigation for the sediment removal projects for the 2001 SMP is proposed to be ~~1.59~~ 1.86 acres of tidal wetland and ~~2.24~~ 1.98 acres of non-tidal wetland. This approach is consistent with the District's Stream Maintenance Program and its draft Environmental Impact Report (EIR).

b. The erosion repair projects will result in non-tidal wetland impacts of 0.05 acres. These impacts are from two projects located in the Uvas/Llagas Watershed (South County Watershed). These impacts will not be considered significant due to their size. There will not be any compensatory mitigation for these impacts.

2. All of the sediment removal projects and their impacts are in the San Francisco Bay watershed (North County); therefore the compensatory mitigation must be located in that watershed. The ~~1.52~~ 1.86 acres of new tidal wetland impacts will be mitigated at the proposed Cargill Pond A-4 mitigation site. ~~0.50~~ 0.14 acre of non-tidal wetland will mitigated at the proposed Los Capitancillos mitigation site and the remaining ~~1.74~~ 1.84 acres at the proposed Coyote Parkway Mitigation Site. If the Los Capitancillos site cannot provide the allotted amount ~~full 1.00 acre~~, the mitigation at the Coyote Parkway Mitigation Site will be increased. (Note: The Coyote Parkway Mitigation Site is expected to yield approximately ~~9~~ 7 acres of wetland mitigation.)

3. Biological surveys for endangered species (California red legged frog and the salt marsh harvest mouse) ~~have~~ were not ~~been~~ completed at the time the IS/MND was circulated. The U.S. Fish and Wildlife Service protocol requires the surveys to be completed during the breeding season in May. If any project is found to have a potential impact to either species, that project will be eliminated from the 2001 SMP Project List and final IS/MND before adoption of the MND. The biological surveys will be included in the final IS/MND.

   The 2001 SMP sites with potential California red-legged frogs habitat were surveyed by District biologists in May 2001, and none of the channels showed evidence of this species. However, pre-construction surveys are recommended to be conducted for the project activities at Calabazas Creek (sediment removal) and Matadero Creek at Josina Avenue (bank protection) due to presence of the species in upstream locations. If found, the District shall implement a relocation plan and other protection measures, in consultation with U.S. Fish and Wildlife Service (Mitigation Measure #1).

   Potential salt marsh harvest mouse habitat was identified only at one site: Matadero Creek sediment removal site. Subsequent review by District biologists and wetland assessment found no evidence of pickleweed habitat for this species, and thus no further surveys were deemed necessary.

4. Other than contribution to potentially significant cumulative wetland impacts (which are assumed to be significant and which are mitigated by #2 above) and potential impacts to endangered species (which will be avoided if found as described in #3 above), the project will not result in significant effects on the environment.

5. In addition to the mitigation measures in #2 and #3 above, the design features of the 2001 SMP which include the best management practices (BMPs) directly incorporated into the project description either avoid, minimize, or reduce environmental effects to a point of less-than-significance; and

6. A Mitigated Negative Declaration will be filed as the appropriate CEQA document for the 2001 SMP.

BASIS OF FINDINGS

Based on the environmental evaluation presented herein, the 2001 SMP will not cause significant adverse effects related to aesthetics, agricultural resources, cultural resources, geology/soils, hazards and hazardous materials, land use/planning, mineral resources, population/housing, public services, recreation, transportation/traffic, and utilities/service systems. In addition, substantial adverse effects on humans, either direct or indirect, will not occur. The 2001 SMP does not affect any important examples of the major periods of California prehistory or history. Nor will the 2001 SMP cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal.

Along with the designs of individual activities, BMPs incorporated into the project descriptions by the District for the 2001 SMP avoid, minimize, and reduce impacts to air quality, biological resources, including fisheries, hydrology/water quality, and noise to less-than-significant levels. In addition, specific mitigation measures have been imposed to mitigate for cumulative wetlands impacts, assumed to be significant.

Based on the Initial Study, the project designs and incorporated BMPs avoid, minimize, and reduce impacts to biological resources to a less-than-significant level. The District acknowledges that sediment removal results in a temporary removal of a total of ~~1.86~~ 2.13 acres of tidal wetland vegetation and ~~2.40~~ 2.19 acres of nontidal wetland vegetation. Erosion repair results in potential permanent loss of 0.05 acres of nontidal wetland vegetation.

1. The 2001 SMP affects wetland vegetation through the direct removal of wetland vegetation by sediment removal. No permanent loss of wetlands or wetland habitat is expected to occur through direct removal, filling, hydrological interruption, or other means, although a temporary removal of wetland vegetation will occur. Habitat conditions will not be significantly altered, nor are the conditions that lead to the establishment of wetland vegetation significantly altered. The channels will be equally capable of supporting wetland vegetation after sediment removal as prior to implementation of the project. The 2001 SMP sediment removal sites were developed for flood control purposes, and sediment removal is a routine, cyclic activity that occurs to maintain flood control capacity. Based on the results of the District's regrowth study, the impacts are expected to be temporary at each activity site.

2. The District has at least 10 years of sediment removal history, which shows the cyclic nature of sediment removal. The District has wetland vegetation data for the last two years, which shows 65% and 98% average regrowth within one and two years, respectively, after 1997 sediment removal at six non-tidal freshwater sites. Thus, the District expects regrowth of wetland vegetation within the areas affected by the 2001 SMP and individual project, resulting in the impacts to be less-than-significant.

3. It is also recognized that there is a potential for significant cumulative impacts to wetlands when all past and future individual stream maintenance projects are combined. The District has proposed a comprehensive compensatory mitigation program for these types of impacts under the Draft Stream Maintenance Program EIR (March 2001.) Until the Program is adopted and regional permits secured, the District is assuming for purposes of this IS/MND that the 2001 SMP's contribution to cumulative wetland impacts is significant, and is committing to providing permanent freshwater and tidal wetlands as compensation for the temporary impacts caused by the 2001 Stream Maintenance Project, except for sites included in previous year(s) mitigation; Berryessa from Milpitas Boulevard to Calaveras, Berryessa from Cropley to Sierra Creek Confluence, and Sierra Creek downstream of Mauna Kea Lane.

4. The District is making this assumption of significant cumulative impact and commitment to mitigation because the comprehensive cumulative impact analyses being conducted in the Stream Maintenance Program EIR have not yet been adopted. The District anticipates that the mitigation commitment in the 2001 SMP will be included in the calculations performed in the Stream Maintenance Program EIR for purposes of determining what amount of mitigation for any cumulative loss of wetlands is necessary over the long term.

For the 2001 SMP, in addition to the mitigation measures for cumulative wetland impacts, the environmentally sensitive designs and incorporated BMPs avoids, minimizes, and reduces impacts to less-than-significant levels. Thus, under the California Environmental Quality Act, compensatory mitigation is not required for less-than-significant impacts.

The 2001 SMP mitigates the exposure of people and property to existing flood hazards by restoring channel capacity and repairing eroding banks. In addition, the erosion repair aspect of the 2001 SMP has an incremental improvement on water quality by reducing a source of sediment to receiving waters and improving habitat where feasible.

Attached is the Initial Study prepared for the 2001 SMP. The public can review documents used in preparation of the Initial Study at Santa Clara Valley Water District Headquarters Building, 5750 Almaden Expressway, San Jose, California. Please call (408)-265-2607, extension 2702 to make an appointment to review reference documents during business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday.

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SECTION 1. INTRODUCTION

This section describes the purposes of an Initial Study (IS), the decision process to prepare a Negative Declaration (ND) or a Mitigated ND, provides background information on District maintenance activities, a brief description and objectives of the 2001 Stream Maintenance Project (2001 SMP), and a short discussion on other public agencies whose approval is required through the permitting process or who have an interest in the 2001 SMP.

1.1 PURPOSE OF THE INITIAL STUDY

The Santa Clara Valley Water District (District) has prepared this IS pursuant to the California Environmental Quality Act (CEQA) for the 2001 SMP, consisting of sediment removal and bank protection (erosion repair) activities. CEQA lists seven purposes of an IS {CEQA Guidelines 15063(c)}:

1. Provide the Lead Agency (i.e., the District) with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR) or a Negative Declaration (ND).
2. Enable a Lead Agency (i.e., the District) to modify a project, mitigating adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a ND.
3. Assist in the preparation of an EIR, if one is required.
4. Facilitate environmental assessment early in the design of a project.
5. Provide documentation of the factual basis for the finding in a ND that a project will not have a significant effect on the environment.
6. Eliminate unnecessary EIRs.
7. Determine whether a previously prepared EIR could be used with the project.

1.2 DECISION TO PREPARE A NEGATIVE OR MITIGATED NEGATIVE DECLARATION

According to CEQA Guidelines Section 15070, a public agency shall prepare a proposed ND or a Mitigated ND when:

1. The IS shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or
2. The IS identifies potentially significant effects, but:

a. Revisions in the project plans made before a proposed Mitigated ND and IS are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and

b. There is no substantial evidence, in light of the whole record before the agency, that the project as described may have a significant effect on the environment.

CEQA requires a mitigation monitoring or reporting program when a Mitigated Negative Declaration (MND) is proposed to be adopted (Section 15074d. A mitigation monitoring program is required for mitigation measures identified for significant impacts.

1.3 BACKGROUND ON DISTRICT MAINTENANCE ACTIVITIES

1.3.1 Annual Maintenance Projects

The District's stream maintenance program includes many individual activities. Two categories of activities are discussed herein: (1) sediment removal and (2) bank protection (erosion repair.) The objective in maintaining improved channels is to ensure that a channel will have a continuing functional life providing the community with the flood protection as originally intended. In addition, the program provides for the maintenance of natural creeks where the District has legal title or easements. The District requires ownership or easement of a property before construction, repair, or maintenance work can be performed; except in emergencies. District ownership may take the form of fee title or an easement.

The District estimates that it removes an average of 80,000 cubic yards (cy) of sediment on about 16 miles of channel per year in Santa Clara County. This average includes both concrete-lined and earth-lined channels. The number of sites and amount of sediment varies from year to year, but historical records indicate that the District removes sediment from an average of 19 sites per year (Santa Clara Valley Water District, March 2001b). The District estimates that an average of 5,000 linear feet (approximately one mile) of banks may be repaired annually based on historical records, although as with sediment removal the number of sites and linear feet vary from year to year (Ibid.).

Various regulatory agencies have review and/or permit authority over aspects of District maintenance activities, including the U. S. Army Corps of Engineers (Corps), Department of Fish and Game (DFG), and the Regional Water Quality Control Board (RWQCB). In the tidal area of the northern part of Santa Clara County, the San Francisco Bay Conservation and Development Commission (BCDC) has jurisdiction along with the aforementioned agencies. The District obtains permits from these agencies before doing any work, unless the activity is exempt from regulations or general permits exist for a range of activities (see discussion under **Subsection 1.6** below). The District is in the process of preparing a multi-year stream maintenance program and obtaining multi-year permits (see discussion under **Subsection 1.3.2** below). Until the multi-year program is approved and permits obtained, the District is seeking annual authorization for anticipated maintenance work because regional permits are not in effect.

During the process of developing the plans, designs, permit applications and this IS/MND, the District has solicited input from regulators staff and environmental staff. On February 26, 2001, a Lessons Learned Meeting (for the past 2000 Stream Maintenance Project) was held to discuss past projects and to present some of the proposed projects for the 2001 SMP. (See Section 7.3 for attendees.) On March 21 and 29, 2001, tours of the 2001 SMP project sites were conducted. (See Section 7.2 for attendees.)

1.3.2 Multi-Year Stream Maintenance Program

The *Draft Stream Maintenance Program* (SMP) has been prepared to provide the District with long-term guidance to effectively implement certain routine stream maintenance activities in a cost-effective and environmentally sensitive manner. The program is a process and policy document that will be used along with an environmental impact report to obtain permits from regulatory agencies. The Draft SMP and its Draft EIR have recently been released for public review. Until this program is adopted, the District is conducting annual reviews of its routine stream maintenance activities in order to provide the flood protection expected by the citizens of Santa Clara County.

The objectives of the Stream Maintenance Program are as follows:

1. Standardize and codify practices and protocols for routine sediment removal, bank protection and vegetation management in and around the streams and related facilities within the District's jurisdiction.
2. Identify cost-effective routine stream maintenance practices and protocols.
3. Ensure routine stream maintenance activities reflect the District's policies of environmental protection.
4. To the extent practical, avoid or minimize adverse environmental effects and encourage preservation and restoration.
5. Establish effective and economically practical compensatory mitigation for residual significant environmental impacts of routine stream maintenance activities.
6. Establish practices and protocols that optimize operational flexibility and allow the integration of lessons learned and improvements in Best Management Practices.

The Stream Maintenance Program applies to all of the District's routine stream maintenance activities, as indicated above, and includes all streams, channels, canals, and adjacent property that the District owns or holds an easement for access and maintenance. The Stream Maintenance Program area consists of 191 streams for approximately 828 miles and 10 canals for 41 miles. The

Stream Maintenance Program is intended for a 20-year planning timeframe. Permits from regulatory agencies are expected to last for a period of 10 years after which time the District would apply for renewal.

1.4 SANTA CLARA VALLEY WATER DISTRICT POLICIES

In October 1999, the District Board of Directors adopted Policy E-1 in which the stated mission of the District is "a healthy, safe, and enhanced quality of living in Santa Clara County through the comprehensive management of water resources in a practical, cost-effective, and environmentally sensitive manner." In adopting this policy, the Board set the following directives:

E-1 There is a healthy and safe environment for residents and visitors.

- 1.1.1 There is a reliable supply of healthy, clean drinking water.
- 1.1.2 There is reduced potential for flood damages.

E-2 There is enhanced quality of life in Santa Clara County.

- 2.1.1 Watersheds, streams, and the natural resources therein are protected and when appropriate enhanced or restored.
- 2.2.2 There are additional open spaces, trails, and parks along creeks and in the watersheds when reasonable and appropriate.

As part of the watershed enhancement and restoration directive, the District's policy is to mitigate for adverse impacts of District activities, as well as identify opportunities to enhance or restore natural resource benefits of streams and watersheds. As part of the CEQA process, impacts of District activities upon biological resources will be analyzed and measures to mitigate impacts will be identified in three levels: (1) those measures necessary to mitigate significant impacts as defined under CEQA, (2) those measures resulting in no net loss of biological resources in watersheds and streams where this level of mitigation is in excess of what staff believes is required by CEQA, and (3) those measures resulting in a net gain of the biological resources in the watersheds and streams. This will allow the Board to make a distinction between mitigation measures required under CEQA and measures that are considered enhancement.

1.5 2001 STREAM MAINTENANCE PROJECT OVERVIEW

The title of this project is *2001 Stream Maintenance Project* (2001 SMP), which incorporates the year the District is expecting to perform the work covered in this CEQA document. It may be necessary to carry over some activities to subsequent years because of funding, permitting or personnel constraints. If that occurs, the carried-over projects in this document will be re-examined by District staff to determine if significant changes have occurred that warrant the preparation of a subsequent environmental document. CEQA Guidelines Sections 15162 - 15164 describes the process the District will follow to determine if a subsequent environmental document is required. If there are no significant changes, revisions to this IS/MND are not required.

This section briefly describes the proposed 2001 Stream Maintenance Project **Section 2.0** provides greater detail on the individual projects and BMPs.

Objectives of the 2001 SMP consist of:

1. Restoring flood control capacity in improved channels by removing accumulated sediment to meet the requirements or criteria of the Federal Emergency Management Agency (FEMA), the U. S. Army Corps of Engineers (Corps), or the Natural Resources Conservation District (NRCD); or

2. Restoring banks to the pre-erosion footprint and shape and,

4. Performing the work in an environmentally sensitive manner.

1.5.1 Sediment Removal

Sediment removal is the act of mechanically removing sediment that has deposited within a channel. Typically, the District removes sediment whenever it (1) reduces channel capacity, thereby increasing the potential for flooding of adjacent areas, (2) prevents tide gates, outfalls, stream gages, road crossings, and similar appurtenant structures from operating properly, (3) impedes fish passage in low-flow channels or access to fish ladders, or (4) causes unstable conditions that threaten levees.

Seventeen sediment removal sites are included in the 2001 SMP, all of which occur within earthen or concrete improved channels. An "improved channel" is typically a natural creek that human activity significantly altered to improve the passage of flood flows. Alterations or improvements include channelization (e.g., straightening and constructing engineered banks or levees) using concrete, riprap, or earth (SCVWD and CDFG, 1990). Under normal maintenance practices, the District removes sediment only from improved channels that are under its jurisdiction either to meet maintenance guidelines or to conform to FEMA standards.

Sediment removal site locations are shown on Figure 1, and include the sites outlined below. A total of 75,310 cubic yards (cy) of sediment is proposed for removal along approximately 67,000 linear feet of channel (approximately 13 miles) as part of the 2001 SMP. Two sites have sediment removal ancillary to erosion repair activities and are included under the Erosion Repair activities: Coyote Creek (tidal) and Rucker Creek (nontidal.) Two sediment removal sites are tidal (Adobe Creek and Guadalupe River). The other sediment removal sites are nontidal, except a portion of Calabazas Creek is tidal.

2001 SMP Sediment Removal Sites

1. Adobe Creek at Highway 101
2. Berryessa Creek, Milpitas Blvd. to Calaveras Blvd.
3. Berryessa Creek, Cropley Ave. to Sierra Creek Confluence
4. Berryessa Creek downstream and upstream of Piedmont Road
5. Calabazas Creek downstream of Highway 101
6. Calera Creek, UPRR to Milpitas Blvd.
7. Calera Creek upstream of Escuela Parkway
8. Canoas Creek Guadalupe Confluence to Cottle Road
9. Coyote Creek upstream Lower Penitencia confluence (sediment removal is ancillary to the bank protection)
10. Flint Debris Basin, upstream of Mount Pleasant Road
11. Guadalupe River, upstream Tasman to Montague
12. Los Coches Creek, downstream of Interstate 680 to Dempsey Rd.
13. Matadero Creek, Highway 101 to Louis Road
14. Randol Creek upstream ~~and downstream~~ of Bret Harte Drive
15. Ross Creek upstream ~~and downstream~~ of Cherry Ave.
16. Rucker Creek downstream Guibal Ave. (sediment removal is ancillary to the bank protection)
17. Sierra Creek downstream of Mauna Kea Lane

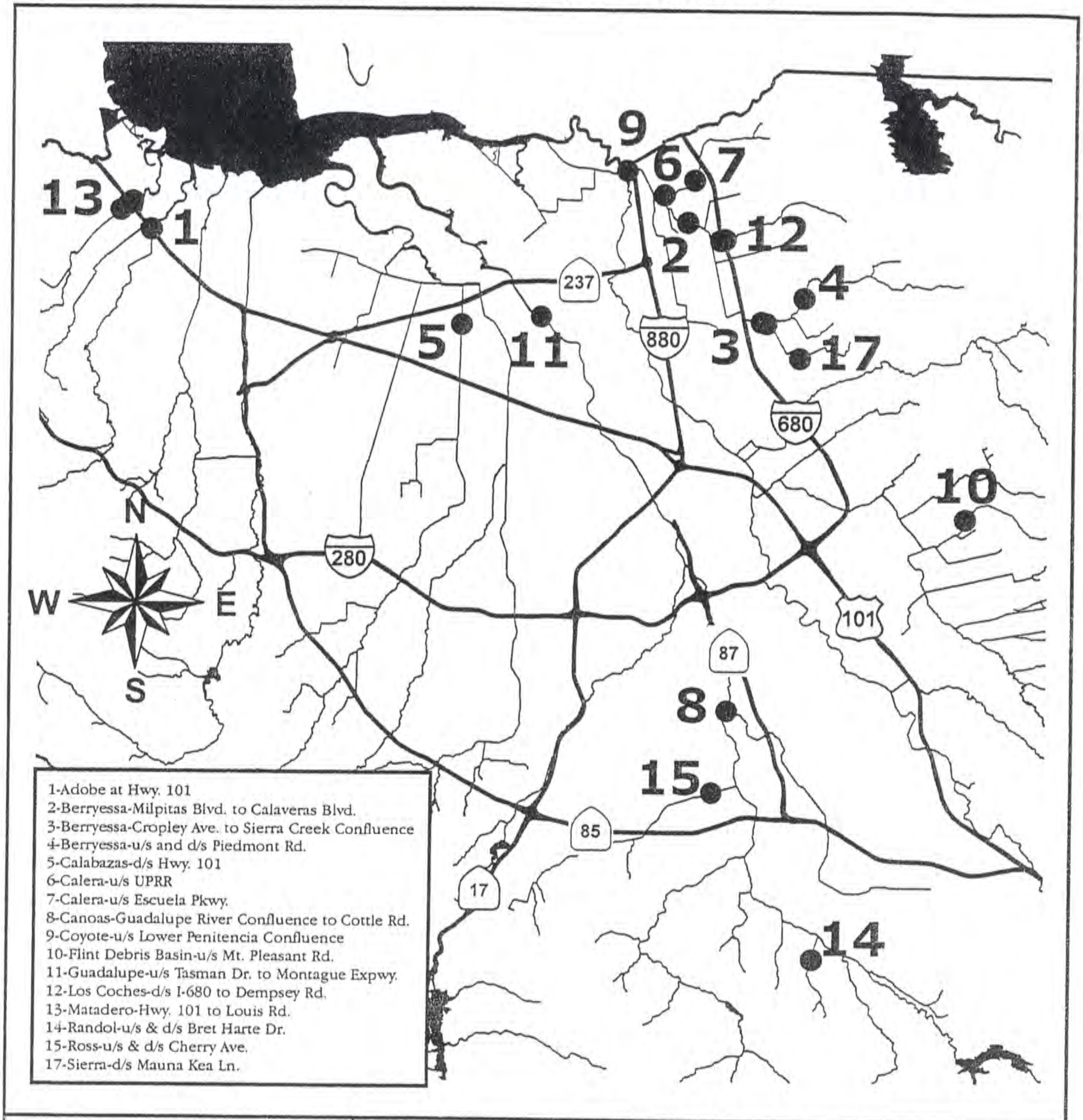
1.5.2 Bank Protection

The bank protection projects are within both improved and unimproved channels. The District undertakes bank protection (erosion repair) projects to "natural" channels only when the District has an easement or fee title, and the eroding banks (1) causes or could cause significant damage to a property or adjacent property, (2) is a public safety concern, (3) negatively affects transportation, recreational use, or other public facilities, (4) negatively affects water quality, or (5) negatively affects riparian habitat. Natural channels have not been engineered and altered to contain a certain design flood event. Erosion repair activities in improved channels are undertaken for the same reasons noted above as well as ensuring that the channel functions as designed for flood protection.

Repairs may take several forms, from installing "hard" structures (e.g., rock, concrete, sack concrete, gabions) to "soft" structures (e.g., willow brush mattresses, log crib walls, pole plantings, hydro-seeding)or a combination of hard and soft structures.

Fifteen bank protection (erosion repair) projects are included in the 2001 SMP, all of which are nontidal, except for Coyote Creek, Lower Penitencia Creek and Guadalupe Slough. Bank protection site locations are shown on Figures 3 and 4, and include the sites outlined below. Erosion repairs are proposed along 9,965 linear feet of channel (approximately 1.9 miles).

Figure 1-Vicinity Map for Sediment Removal Projects-North County



1-Adobe at Hwy. 101
2-Berryessa-Milpitas Blvd. to Calaveras Blvd.
3-Berryessa-Cropley Ave. to Sierra Creek Confluence
4-Berryessa-u/s and d/s Piedmont Rd.
5-Calabazas-d/s Hwy. 101
6-Calera-u/s UPRR
7-Calera-u/s Escuela Pkwy.
8-Canoas-Guadalupe River Confluence to Cottle Rd.
9-Coyote-u/s Lower Penitencia Confluence
10-Flint Debris Basin-u/s Mt. Pleasant Rd.
11-Guadalupe-u/s Tasman Dr. to Montague Expwy.
12-Los Coches-d/s I-680 to Dempsey Rd.
13-Matadero-Hwy. 101 to Louis Rd.
14-Randol-u/s & d/s Bret Harte Dr.
15-Ross-u/s & d/s Cherry Ave.
17-Sierra-d/s Mauna Kea Ln.

PURPOSE: To remove sediment from flood control channels to restore capacity.

VICINITY MAP

8000 0 8000 16,000 Feet

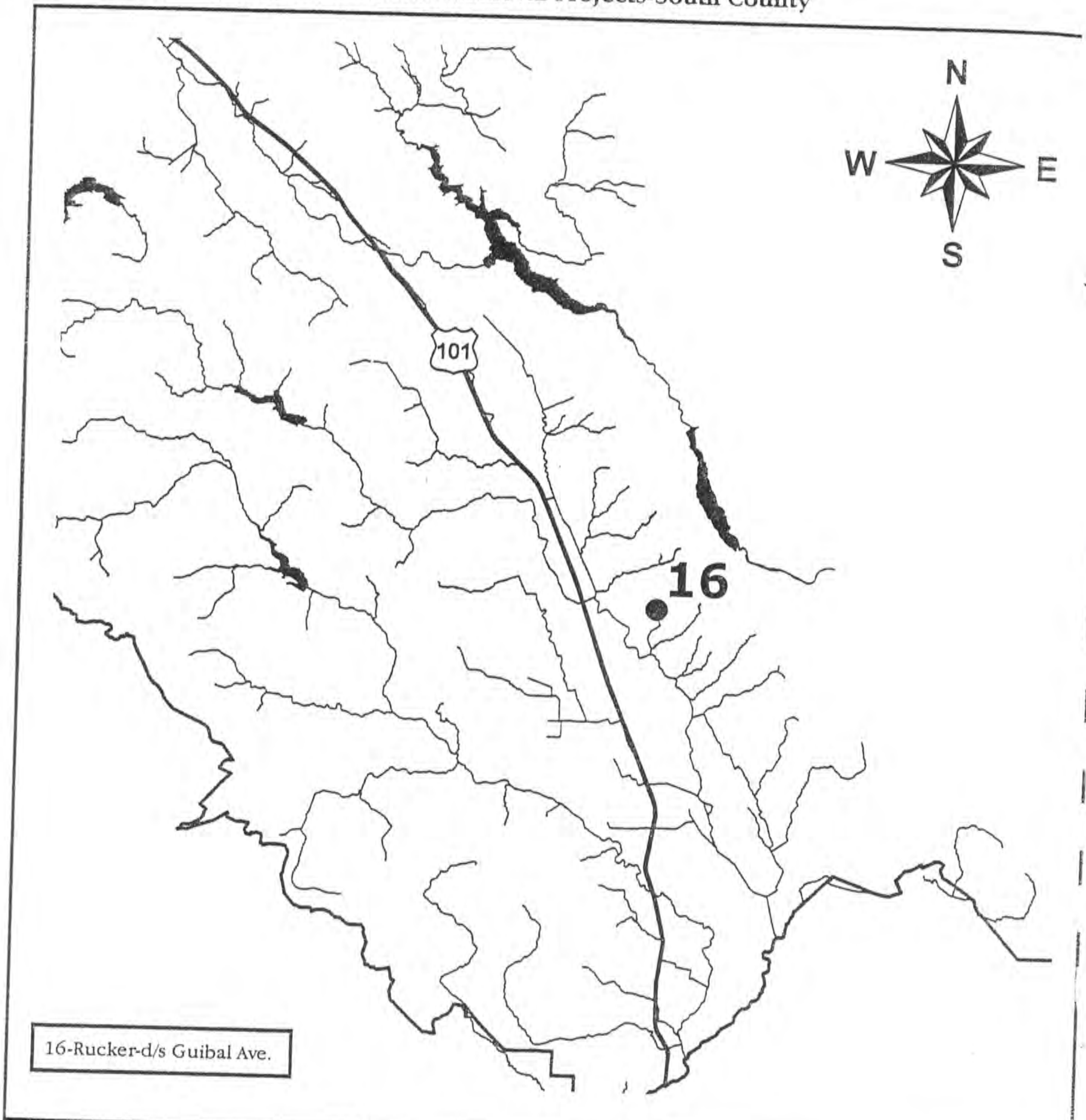
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:

COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley
Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure 2-Vicinity Map for Sediment Removal Projects-South County



PURPOSE: To remove sediment from flood control channels to restore capacity.

VICINITY MAP

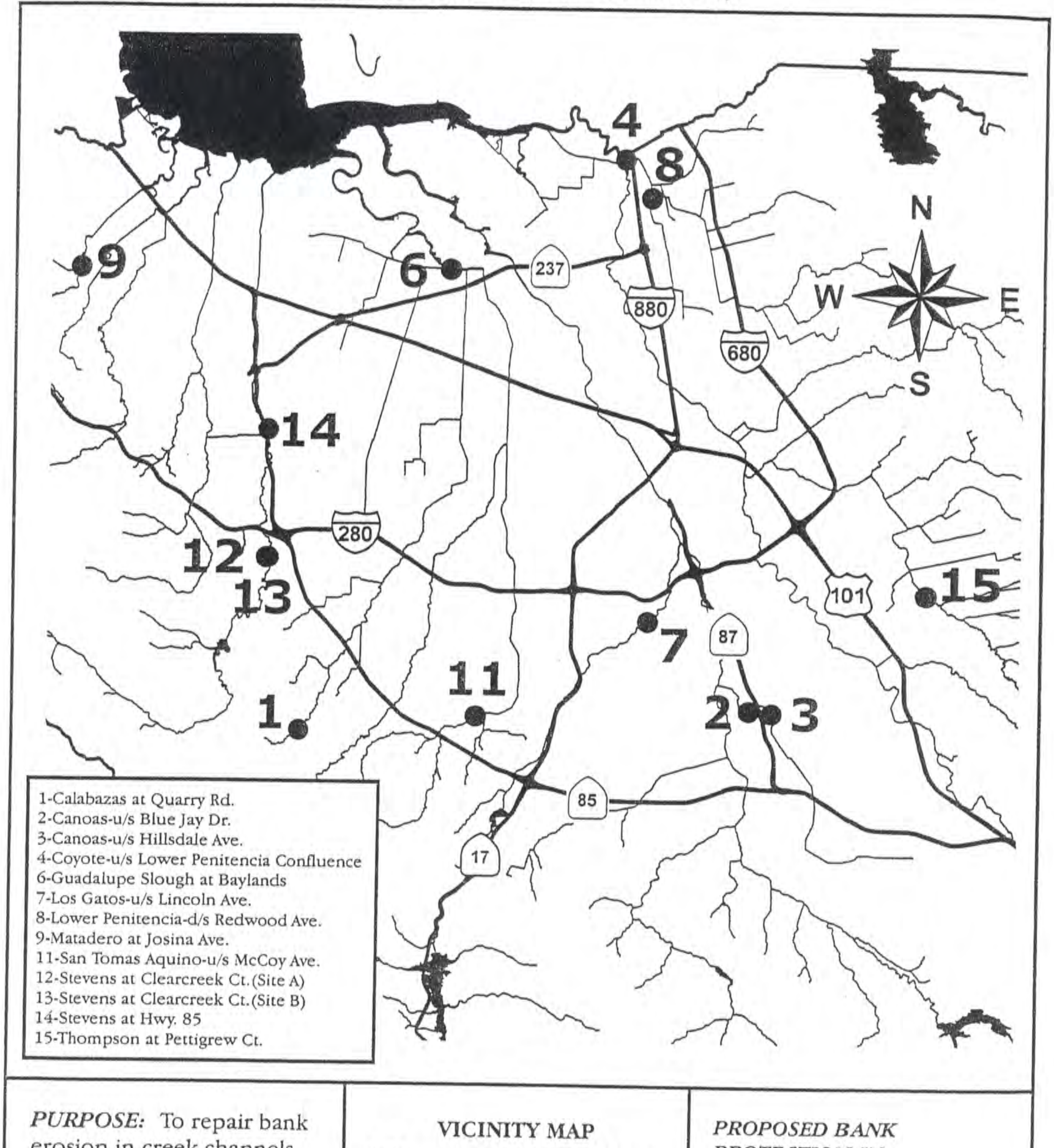
8000 0 8000 16,000 Feet

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:

COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley
Water District
DATE: May 2001

Figure 3-Vicinity Map for Bank Protection Projects-North County


4
8
9
6
237
880
680
N
W
E
S
14
280
12
13
101
15
7
87
11
1
2
3
85
17
1-Calabazas at Quarry Rd.
2-Canoas-u/s Blue Jay Dr.
3-Canoas-u/s Hillsdale Ave.
4-Coyote-u/s Lower Penitencia Confluence
6-Guadalupe Slough at Baylands
7-Los Gatos-u/s Lincoln Ave.
8-Lower Penitencia-d/s Redwood Ave.
9-Matadero at Josina Ave.
11-San Tomas Aquino-u/s McCoy Ave.
12-Stevens at Clearcreek Ct.(Site A)
13-Stevens at Clearcreek Ct.(Site B)
14-Stevens at Hwy. 85
15-Thompson at Pettigrew Ct.

PURPOSE: To repair bank erosion in creek channels.

VICINITY MAP

8000 0 8000 16,000 Feet

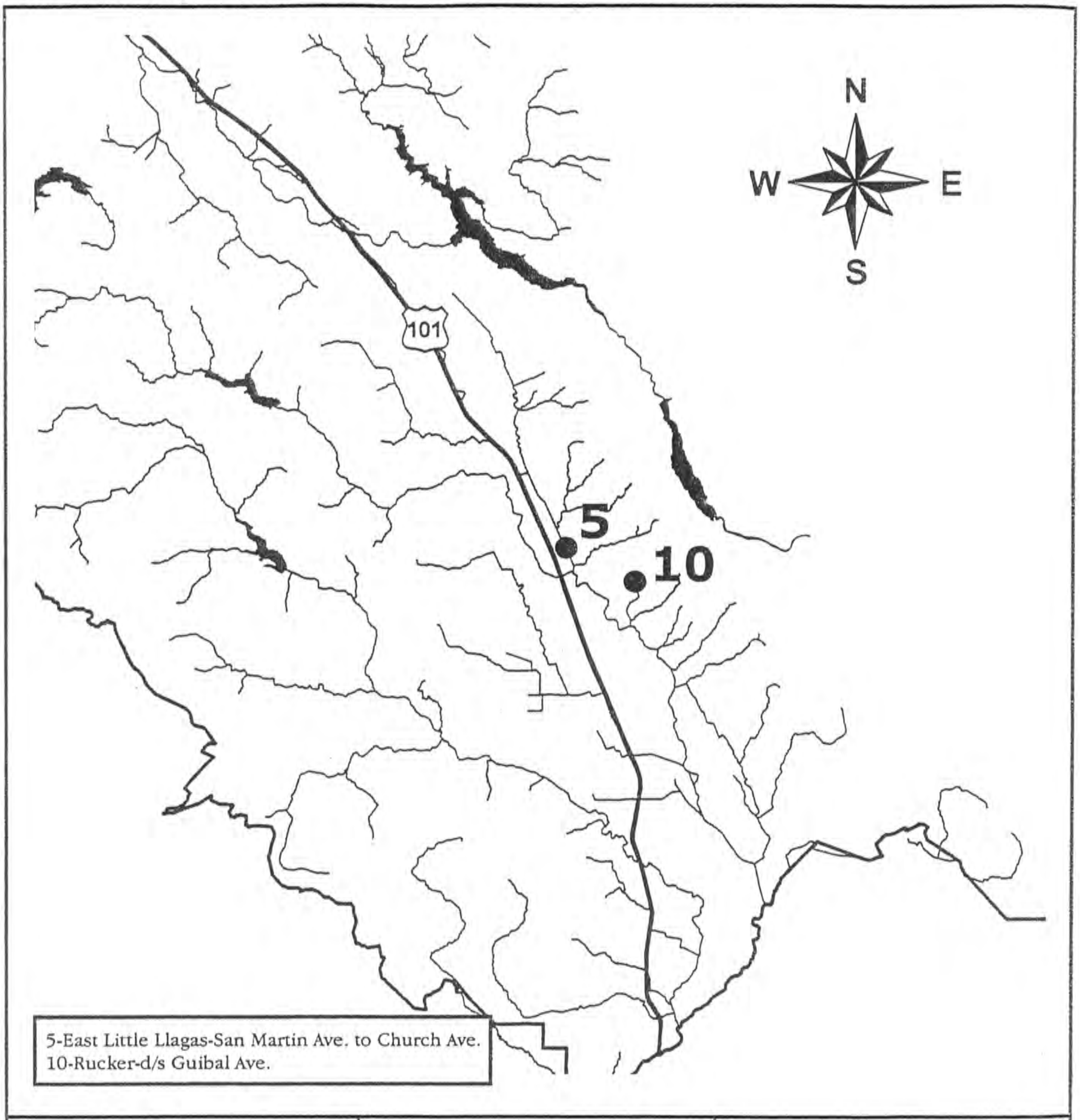
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED BANK PROTECTION IN:

COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley
Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure 4-Vicinity Map for Bank Protection Projects-South County



5-East Little Llagas-San Martin Ave. to Church Ave.
10-Rucker-d/s Guibal Ave.

PURPOSE: To repair bank erosion in creek channels.

VICINITY MAP

8000 0 8000 16,000 Feet

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED BANK PROTECTION IN:

COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley
Water District
DATE: May 2001

04/27/2001 11:00 a.m.

2001 SMP Bank Protection Sites

1. Calabazas Creek at Quarry Road
2. Canoas Creek downstream of Bluejay Drive
3. Canoas Creek upstream of Hillsdale Avenue
4. Coyote Creek upstream Lower Penitencia Confluence
5. East Little Llagas Creek, San Martin Avenue to Church Avenue
6. Guadalupe Slough at Baylands
7. Los Gatos Creek upstream of Lincoln Avenue
8. Lower Penitencia Creek downstream of Redwood Avenue
9. Matadero Creek at Josina
10. Rucker Creek downstream of Guibal Avenue
11. San Tomas Creek upstream of McCoy Avenue
12. Stevens Creek at Clearcreek Court (Site A)
13. Stevens Creek at Clearcreek Court (Site B)
14. Stevens Creek at Highway 85
15. Thompson Creek downstream of Pettigrew Court

1.6 REGULATORY REQUIREMENTS

The following section summarizes the role of the agencies that have permit or review authority over District maintenance projects and activities. Generally, sediment removal and bank protection activities require permits from the U. S. Army Corps of Engineers, the California Regional Water Quality Control Board, the California Department of Fish and Game, and the San Francisco Bay Conservation and Developmental Commission, as described below. Various other state and federal agencies have been contacted regarding the 2001 SMP.

1.6.1 U. S. Army Corps of Engineers

The U. S. Army Corps of Engineers (Corps) regulates discharges of dredged or fill material into waters of the U. S., which includes wetlands, under Section 404 of the Clean Water Act and under Section 10 of the Rivers and Harbors Act. Two types of permits exist under Section 404: individual and general. Nationwide permits (NWPs) are a type of general permit issued for a suite of activities found to have a *minimal* (emphasis added) effect on the environment by the Corps. If an activity has more than minimal effect or does not fit the parameters of a certain NWP, then the Corps issues an individual permit.

Sediment removal activities are not deliberate discharges of fill material; however, temporary fill can occur because of ancillary activities such as installing cofferdams or access ramps, potentially affecting jurisdictional wetlands. Installing cofferdams or access ramps involving fill into jurisdictional areas are regulated activities under NWP #33 (Temporary Construction, Access, and Dewatering.) Excavation of sediment in tidal areas is a regulated activity under Section 10, however, excavation in nontidal areas is not a regulated activity.

Bank protection activities involve deliberate discharges of fill material to restore the banks to their original footprint and shape or, in the case of channel bed stabilization, fill is placed to restore the invert . The original footprint and shape is reestablished to protect the bank from future erosion. When the fill is below ordinary high water (OHW) in nontidal areas, this activity is subject to Corps regulation. NWP #13 (Bank Stabilization) is for bank protection activities. For ancillary activities to the bank protection work, such as installing cofferdams or access ramps, the District will seek authorization under both NWP #33 and to NWP #13.

In addition to the Corps regulatory authority, some District channels were built by the construction division of the Corps. The District is contractually bound to maintain Corps-built channels to the design condition. We have operations and maintenance agreements that determine when the District is to perform maintenance work on Corps built channels.

1.6.2 U. S. Fish and Wildlife Service/National Marine Fisheries Service

The U. S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS) implements and enforces the Endangered Species Act (ESA) of 1973 as amended. Under the ESA, it is unlawful to "take" listed species of plants and animals. Take is defined as: "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect . . . or to engage in any such conduct." USFWS have also defined take to include significant habitat modification or degradation that actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter. Under Section 7 of the ESA, consultation occurs on a Corps permit application. In the absence of a federal agency involved in a project, a habitat conservation plan must be adopted under Section 10 of the ESA.

1.6.3 California Regional Water Quality Control Board

EPA has designated the California Regional Water Quality Control Boards (RWQCB) to have the authority under Section 401 of the Clean Water Act to waive or certify activities subject to the Corps jurisdiction for water quality impacts. RWQCBs also have authority under the state Porter-Cologne Act to regulate waste discharges affecting waters of the state. State waters are defined as "any water, surface or underground, including saline waters, within the boundaries of the State" (Porter-Cologne Act). Based on this definition, wetlands water quality control is within the of the San Francisco Bay RWQCB jurisdiction. Starting in 1998, the S. F. Bay RWQCB opted to regulate sediment removal activities under the Porter-Cologne Act, issuing a Waste Discharge Requirement (WDR) in place of a water quality waiver or certification for the District's sediment removal projects. Bank protection activities requiring 404 permits are still regulated under Section 401 and waivers or certifications are issued.

The Porter-Cologne Act requires RWQCBs to develop, adopt and implement a Water Quality Control Plan (referred to as a Basin Plan). Santa Clara County is divided into two RWQCBs regions "San Francisco Bay" and "Central Coast" each with their own Basin Plan. Basin plans are master policy documents containing descriptions of the legal, technical, and programmatic bases of water quality regulation. The plans include a statement of beneficial uses the RWQCB protects, water quality objectives needed to protect beneficial uses, and strategies and time schedules for achieving water quality objectives. Issuance of a WDR meets the requirements of a Clean Water Act Section 401 certification and the objectives of the Basin Plans.

Under their Basin Plan, the SF Bay RWQCB adopted Governor's Executive Order W-59-93, which established the following objectives: "(1) ensure no overall net loss and achieve a long-term net gain in the quantity, quality, and permanence of wetlands acreage and values ... in a manner that fosters creativity, stewardship and respect for private property, (2) reduce procedural complexity ..., and (3) encourage partnerships ... and cooperative planning ... ". Within the policy, statements are made that the State is to "encourage regulatory flexibility in situations in which wetlands are created unintentionally or incidental to other activities, encourage regulatory flexibility to allow public agencies and water districts to create wetlands but later remove them if the wetlands are found to conflict with the primary purpose to which the property is devoted, direct State agencies to develop internal wetlands conservation policies and programs that are compatible with programmatic goals such as flood control, groundwater recharge, ..." (Governor's Executive Order W-59-93).

1.6.4 California Department of Fish and Game

If an activity diverts, obstructs, or changes the natural flow or the bed, channel, or bank of any river, stream, or lake, in which there are at any time an existing fish or wildlife resource or from which these resources derive benefit or if an existing fish or wildlife resource may be substantially adversely affected, California Department of Fish and Game (CDFG) requires notification. CDFG can issue individual streambed alteration agreements (commonly referred to as a "1601" from the applicable section in the CDFG code to public agencies (a "1603" is issued to private parties).

CDFG can develop, in concert with an applicant, a Memorandum of Understanding (MOU). The District has two MOUs for stream maintenance with CDFG: one for unimproved streams and one for improved streams. The MOU for improved streams is specifically for defining routine maintenance activities in improved channels that do not require further notice and agreements in compliance with the Fish and Game Code (SCVWD, 1998 and SCVWD & California Department of Fish and Game, 1990).

An unimproved channel, as defined in the second MOU, is a waterway in which significant man-made alterations have not occurred and which supports fish and wildlife resources (SCVWD & California Department of Fish and Game, 1991). The unimproved channel MOU allows the District to install rock or gabions, but not sacked concrete, from the toe-of-slope to a maximum height of six vertical feet above the channel invert and the length has to be less than 100 linear feet (lf)at certain, identified stream locations. If a proposed activity does not meet these qualifications, then CDFG issues a 1601 for that proposed activity.

Both MOUs also outline reporting requirements and a fee schedule based on the number of maintenance projects completed within a calendar year.

The District performs maintenance work at a time and in a way that meets the District's obligations to public health and safety, while recognizing the need to minimize adverse impacts to fish and wildlife resources and their habitat. Periods of concern to CDFG are March through June for nesting birds, and October through March for anadromous fish. The MOUs incorporate a standard list of best management practices (BMPs) designed to reduce impacts to fish and wildlife resources. These BMPs include removing sediment from half of the channel in alternating years (large channels only), diverting flows around the work site, minimizing vegetation removal, reseeding disturbed areas, and protecting trees greater than six inches diameter-at-breast-height (unimproved channels only).

In addition to statutes or regulations, such as 1601 agreements, the CDFG Commission has a number of policies regarding environmental resources, such as wetlands. Policies serve as guidance for actions, but they do not have a legal standing. In the Fish and Game Code appendix on policies, it is noted that policies are not statutes (i.e., they do not have a legal standing) (CDFG, 1999). Also, on the CDFG's Internet Web Site, under Legal Mandate, it is pointed out that the "department has no officially adopted regulations or statues pertaining to wetlands."

To summarize the polices of the CDFG Commission as related to wetlands, it is their policy to strongly discourage conversion of wetlands which result in a reduction of wetland acreage or wetland habitat value and opposes wetland development proposals, unless, at a minimum, project mitigation measures assures a "no net loss" of either wetland habitat values or acreage. The Commission found the policy to be "nonregulatory in nature" (CDFG, 1999).

1.6.5 San Francisco Bay Conservation and Development Commission

The San Francisco Bay Conservation and Development Commission (BCDC) is responsible for carrying out the Bay Plan, a comprehensive plan with a goal of conserving the water of the San Francisco Bay, and regulating shoreline development. Policies include preventing and precluding bay fill, promoting public access, and reserving areas for water-oriented activities. BCDC jurisdiction includes the San Francisco Bay, including a 100-foot shoreline band, certain tidal portions of creeks, historic bay lands and salt ponds. Routine maintenance activities, including sediment removal and bank protection, are authorized under the District's BCDC permit # M77-113, which was amended in 2000 and is good through June 2005. None of the 2001 Stream Maintenance Projects are within BCDC jurisdiction.

1.6.6 Cities and Santa Clara County

All of the general plans for the Santa Clara County and the various cities within the county contain goals and policies concerning creeks and riparian areas, addressing restoration, enhancement and use of the creeks. The District is a separate public entity and the maintenance of creeks and channels within our jurisdiction is not subject to these general plans or local ordinances. A corollary to this situation is that the District is not involved in land use planning decisions, though land use decisions may have a profound effect on maintenance, operations, and alternatives available to the District. The District may comment on proposed development projects, but has limited authority to alter development through the permitting process.

1.7 ORGANIZATION OF THE INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Section 2.0 describes the features of the 2001 SMP, including best management practices to avoid, minimize, or reduce impacts to a less-than-significant level, the environmental setting and location. **Section 3.0** is the Environmental Checklist. **Section 4.0** addresses the impacts of the proposed maintenance activities as they are described in Section 2.0 and identified on the checklist in Section 3.0. **Section 5.0** identifies a mitigation monitoring plan for identified mitigation measures. **Section 6.0** lists District personnel who contributed to this document, and **Section 7.0** lists references used in the preparation of this document.

SECTION 2. 2001 STEAM MAINTENANCE PROJECT LOCATION AND DESCRIPTION

The 2001 SMP consists of removing sediment within improved flood control channels at the sites described under **Subsection 2.1** and bank protection within improved or unimproved channels at the sites described under **Subsection 2.2**. Table 1 (page 2-3) summarizes key features of the project activities. **Subsection 2.3** identifies best management practices (BMPs) that will be incorporated at the project sites.

2.1 SEDIMENT REMOVAL

2.1.1 General Description

The following is a general description of the work activities at the sediment removal sites:

1. All sites are classified as improved flood control channels. They are earth trapezoidal, ~~or~~ concrete trapezoidal ~~rectangular~~ channels or combination earth-concrete trapezoidal channels and sediment removal is performed to restore as-built conditions and hydraulic capacity.

2. Heavy equipment such as excavators, backhoes, gradalls, loaders, low ground pressure crawlers, water trucks, flatbed trucks, street sweepers, draglines, bulldozers, motor graders, low boys, and dump trucks are the principal equipment used. Other equipment, such as pumps, generators, and bypass pipes may be used as necessary.

3. Vehicles will access the sites by using local streets and highways, existing maintenance roads along the channels, and pedestrian/bike trails except where otherwise noted. If new temporary access is required, BMP #15 will be applied.

4. Equipment will operate from maintenance roads, levee side slopes, or within the channels when removing sediment.

5. To install cofferdams, stream flow bypass channels, or other types of diversion structures, live streams will be temporarily affected. The District will monitor the sites in accordance with the Water Quality Monitoring Plan approved by the RWQCB in accordance with the Waste Discharge Requirements (WDR) to be issued by the RWQCB.

6. Sediment will be removed to an upland site or landfill in accordance with the landfill requirements and the RWQCB. Where the material is appropriate, it may be used to repair levee roads, used as road base material, used in bank protection activities, or for another reuse function after prior authorization by the RWQCB. It will not be used to fill waters of the U. S., unless the responsible party using the material has the necessary permits and authorizations. Sediment will be tested in accordance with the ~~soil~~ sediment characterization plan approved by the RWQCB, in accordance with the WDR for this project.

7. All sites will comply with the appropriate conditions of the RWQCB WDR, CDFG MOU for improved channels or individual 1601 agreements and the Corps' NWPs.

2.1.2 Detailed 2001 SMP Sediment Removal Descriptions

A total of approximately 75,310 cubic yards (cy) of sediment is proposed for removal along approximately 67,000 linear feet of channel (approximately 13 miles) as part of the 2001 SMP. Two sites have sediment removal ancillary to erosion repair activities and are addressed in **Subsection 2.2.2** under the Bank Protection activities: Coyote Creek (tidal) and Rucker Creek (nontidal.) All other sediment removal sites are nontidal except for Adobe Creek, a portion of Calabazas Creek and Guadalupe River.

The following is a detailed description of each sediment removal site. The project location by creek name, cross street and city (description and by station numbers--there is 100 feet between each station number), amount of material removed (within Corps jurisdiction) in cubic yards (cy), amount of temporary fill (cy temp), and duration (approximate working days) follows each location. Table 1 (page 2-3) summarizes key features of the project activities. **Appendix A** includes a set of project plans, cross sections, location maps, and photos for each of the sediment removal activities. **Section 2.3** outlines Best Management Practices (BMPs) that will be implemented during the project. The following abbreviations are used: u/s is upstream and d/s is downstream.

1. **Adobe Creek at Highway 101.** *Palo Alto; Sta 129+00 - 134+00); ~1,000 cy; 10 cy temp.; Duration: ~8 days*

   Watershed Description. Adobe Creek has its origin in the Santa Cruz Mountains below Monte Bello Ridge. It flows east out of the mountains through the Hidden Villa Trust to the town of Los Altos Hills and through the cities of Los Altos, Mountain View, and Palo Alto. The creek ultimately flows into the Palo Alto Flood Basin immediately northeast of Highway 101. The watershed area measured from the nearest catch point to the project is approximately 10 square miles. Within the project limits, the creek has perennial flows, is influenced by the tide basin, and is defined as tidal.

   Project Setting. In the project area, the channel was constructed in 1987 as a concrete-lined, freshwater flood control channel. The channel width is approximately 45 feet wide with side slopes of 1/2 horizontal (H) to 1 vertical (V). The channel contains minimal aquatic vegetation growing in the accumulated sediment. The surrounding area is urban residential and high-tech industrial.

   Maintenance History. Sediment in or near the project area was removed during the following years at the noted location: 1981 (130+00 to 159+00 - 3,900 cy), 1982 (130+00 to 164+00 – 6,100 cy), 1985 (130+00 to 164+00 – 4,200 cy), 1993 (129+00 to 160+00 – unknown quantity), 1994 (130+00 to 170+00 – 1,500 cy), 1996 (129+00 to 180+00 – 8,100 cy), 1999 (130+00 to 190+00 - 9,600 cy).

TABLE 1

SUMMARY OF 2001 STREAM MAINTENANCE PROJECTS

	Creek-Location	Length (Feet)	Excavation or Fill Volume (CY)	Temporary Fill Volume (CY)	Duration (Days)	Dewater-Coffer Dam	Temporary Wetland Removal (Acres)	Channel Type
	Sediment Removal							
1	Adobe Creek at Highway 101	500	1,000	10	8	Yes	0.01	Concrete
2	Berryessa, Milpitas-Calaveras	3,200	5,900	0	20	No	0.27	Earth
3	Berryessa, Cropley-Sierra Cr.	1,050	2,400	10	12	Maybe	0.00	Earth/Concrete
4	Berryessa u/s & d/s Piedmont	750	1,300	5	10	Maybe	0.03	Earth/Concrete
5	Calabazas Creek d/s Highway 101	8,600	30,000	75	30	Yes	1.71	Earth
6	Calera, UPRR-Milipitas	650	600	5	7	Yes	0.17	Concrete
7	Calera u/s Escuela	40	230	5	3	Yes	0.05	Earth
8	Canoas Creek, Guadalupe Confluence to Cottle Road	39,000	1,900	20	25	Yes	0.15	Earth/Concrete
9	Coyote u/s Lower Penitencia Confl.	150	150	See Below				Earth
10	Flint Debris Basin u/s Mt Pleasant Rd.	600	30,000	0	Unknown	No	0.00	Earth Basin
11	Guadalupe u/s Tasman to Montague	7,600	10,000	50	30	Yes	1.58	Earth
12	Los Coches, d/s 680 to Dempsey	800	1,800	30	20	Yes	0.01	Earth/Concrete
13	Matadero Creek, Highway 101 to Louis Road	3,100	4,000	30	15	Yes	0.13	Earth/Concrete
14	Randol Creek u/s Bret Harte Ave.	50	50	5	3	Maybe	0.00	Concrete
15	Ross Creek u/s Cherry Ave	50	100	0	3	Maybe	0.00	Concrete
16	Rucker Creek d/s Guibal	100	30	See Below				Earth
17	Sierra Creek, d/s Mauna Kea	1,300	850	5	8	Maybe	0.16	Earth
	Total	**67,540**	**90,310**	**250**			**4.27**	
	Erosion Repair							
1	Calabazas Creek at Quarry Road	30	15	5	8	Yes	0.00	Natural
2	Canoas Creek d/s of Dow Drive	20	10	5	3	Yes	0.00	Earth/Concrete
3	Canoas Creek u/s of Hillsdale Ave	1,000	1,000	5	30	Yes	0.00	Earth/Concrete
4	Coyote u/s Lower Penitencia Confl.	150	250	10	20	Maybe	0.00	Earth
5	E. Little Llagas San Martin to Church	7,000	0	0	12	No	0.03	Earth
6	Guadalupe Slough at Baylands	50	30	0	12	Yes	0.00	Earth Levee
7	Los Gatos Creek u/s Lincoln	200	300	10	30	Yes	0.00	Natural
8	Lower Penitencia d/s Redwood	315	100	180	18	Yes	0.00	Earth
9	Matadero Creek at Josina Avenue	100	15	10	13	Yes	0.00	Natural
10	Rucker Creek d/s Guibal	100	60	5	5	Maybe	0.02	Earth
11	San Tomas Ck u/s McCoy Ave	550	150	10	18	Maybe	0.00	Earth
12	Stevens Creek at Clearcreek Ct. (Site A)	100	55	65	18	Yes	0.00	Natural
13	Stevens Creek at Clearcreek Ct. (Site B)	100	90	65	12	Yes	0.00	Natural
14	Stevens Creek at Highway 85	50	50	70	24	Yes	0.00	Natural
15	Thompson d/s Pettigrew Ct.	200	270	10	20	No	0.00	Earth
	Total	**9,965**	**2,395**	**450**			**0.05**	

Proposed Work. The work consists of removing approximately 1,000 cubic yards of sediment from the improved portion of Adobe Creek to restore the as-built condition. The limits of work will be from approximately 100-feet downstream of Highway 101 to approximately 200 feet upstream of Highway 101, a length of approximately 500 feet. Approximately 1 to 2-feet of sediment accumulation will be removed from the entire channel bottom.

Sediment Removal Techniques. The work site must be dewatered before work begins. The goal is to keep downstream tide basin flows out of the work site and to bypass upstream flows downstream of the work site. To dewater the site, cofferdams will be constructed upstream and downstream of the work area and flows will be routed downstream using a pump and bypass pipe system. The bypass system will be sized for the actual flows experienced at the time work is completed.

The sediment removal work will take place in the channel bottom. Equipment will push and excavate the sediment and load into dump trucks for off-site disposal. Existing access ramps will be used to access the channel and no temporary fill will be required to access the work area.

2. **Berryessa Creek Milpitas Blvd. to Calaveras Blvd.** *Milpitas; Sta. 55+00 - 87+00); ~5,900 cy; 0 cy temp.; Duration: ~20 days*

Watershed Description. Berryessa Creek originates in the Los Buellis Hills of the Diablo Range, between Ed R. Levine and Alum Rock Parks, east of San Jose. It flows west to Interstate 680, then north through Milpitas to its confluence with Lower Penitencia Creek. Berryessa Creek has a drainage area of 17.03 square miles upstream from the nearest catch point to the project. Within the project limits, Berryessa Creek is perennial, mainly due to urban runoff.

Project Setting. In the project area, the channel is earthen and was constructed in the early 1970's. The channel width is approximately 120 feet wide with side slopes of less than 2H to 1V. In the project reach there is a stand of native and non-native vegetation in the center between a divided low flow channel. The surrounding area is urban.

Maintenance History. A similar amount of sediment as is currently proposed was removed from this area in 1998 in which sediment from the one side of the low flow channel was removed. Sediment removal operations occur regularly at this location on Berryessa Creek. Sediment in or near the project area was removed during the following years at the noted location: 1981 (25+00 to 86+00 — 4,210 cy), 1982 (0+00 to 86+00—23,510 cy), 1986 (22+00 to 86+00—14,352 cy), 1989 (24+00 to 87+00—13,300 cy), 1990 (0+00 to 89+00—7,100 cy), 1994 (56+00 to 87+00—2,800 cy), 1998 (0 to 93+50—30,000 cy), 1999 (0+00 to 86+00—33,040 cy).

Proposed Work. The work consists of removing 5,900 cubic yards of sediment from the as-built constructed low flow section of this earthen section of Berryessa Creek. Sediment removal will occur in areas of sediment deposition outside of the existing low flow channel but within the constructed low flow section. Since the existing low flow channel meanders within the low flow section, sediment removal will occur on the opposite side of the low flow section away from the low flow channel. The work will restore the as-built condition in segmented areas along a 3,200-foot reach in this freshwater section of the creek. Approximately 3 to 4 feet of sediment accumulation will be removed from the channel bottom.

Sediment Removal Techniques. Although the existing low flow channel will have flowing water, no dewatering activities are planned for this project. All work will be performed outside of the existing low flow channel. To avoid impacts to water quality, a 5-foot wide undisturbed sediment berm will be left in place between the low flow channel and the sediment removal areas.

Heavy equipment will utilize existing maintenance access points and roads to setup for removing sediment. Equipment will be stationed on the lower maintenance road to remove sediment in designated areas without impacting the existing low flow channel. All materials and equipment will be stored onsite, outside the creek channel during sediment removal activities. Equipment and trucks leaving the construction area will utilize standardized flagging procedures to assist the vehicles with entering the adjacent roadways.

3. **Berryessa Creek Cropley Ave. to Sierra Creek Confluence** *San Jose; Sta 223+50 - 234+00; ~2,400 cy; 10 cy temp.; Duration: ~12 days*

Watershed Description. Berryessa Creek originates in the Los Buellis Hills of the Diablo Range, between Ed R. Levine and Alum Rock parks, east of San Jose. It flows west to Interstate 680, then north through Milpitas to a confluence with Lower Penitencia Creek. Berryessa Creek has a drainage area of 7.70 square miles upstream from the nearest catch point to the project. Within the project limits, Berryessa Creek is perennial, mainly due to urban runoff.

Project Setting. In the project area, the channel is earthen for 750-feet and concrete-lined for 300-feet and was constructed in 1967. The channel width is approximately 60 feet wide with side slopes of 1.5H to 1V for the earth section and a 20-feet wide U-frame channel in the concrete section. The earthen channel is vegetated with grasses while the low flow channel does not contain vegetation. The surrounding area is urban residential.

Maintenance History. A similar amount of sediment as is currently proposed was removed from this area in 1998. Sediment removal operations occur regularly at this location on Berryessa Creek. Sediment in or near the project area was removed during the following years at the noted location: 1987 (222+50 to 234+00—3,260 cy), 1988 (223+00 to 223+10—10 cy), 1990 (232+00 to 234+00—432 cy), 1994 (223+00 to 239+00—2,500 cy), 1997 (231+00 to 234+00—700 cy), 1999 (223+00 to 234+00—3,850 cy).

Proposed Work. The work consists of removing approximately 1,700 cubic yards sediment from an earthen section and 700 cubic yards from the concrete-lined section of Berryessa Creek. The work will restore the as-built condition in this freshwater creek along this 1,050 foot reach. Approximately 1 to 4 feet of sediment accumulation will be removed from the entire channel bottom.

Sediment Removal Techniques. This section of Berryessa Creek is normally dry during the summer months. No dewatering activities are planned for this project.

Heavy equipment will utilize existing access points and maintenance roads to perform sediment removal activities. Due to the depth of the channel, it will be necessary to construct an access ramp to the channel bottom to allow equipment to move sediment into stockpiles which will be removed and loaded into trucks by equipment located at the top of bank. All materials and equipment will be stored onsite, outside the creek channel during sediment removal activities. Equipment and trucks leaving the construction area will utilize standardized flagging procedures to assist the vehicles with entering the adjacent roadways.

4. **Berryessa Creek downstream and upstream of Piedmont Road.** *San Jose; Sta 283+00 - 290+50; ~1,300 cy; 5 cy temp.; Duration: ~10 days*

Watershed Description. Berryessa Creek originates in the Los Buellis Hills of the Diablo Range, between Ed R. Levine and Alum Rock parks, east of San Jose. It flows west to interstate 680, then north through Milpitas to a confluence with Lower Penitencia Creek. Berryessa Creek has a drainage area of 4.51 square miles upstream from the nearest catch point to the project. Within the project limits, Berryessa Creek is perennial, mainly due to urban runoff. This section of Berryessa Creek is freshwater.

Project Setting. In the project area, the channel was constructed in 1972 as a concrete-lined facility in anticipation of the heavy sediment load emanating from the upstream unstable watershed. The channel width is approximately 97 feet wide with side slopes of 2H to 1V. The development pattern in the area is urban residential. Sparse vegetation builds up in the sediments. There is no significant public use of the area.

Maintenance History. Sediment removal operations occur regularly at this location on Berryessa Creek. Sediment in or near the project area was removed during the following years at the noted location: 1986 (284+00 to 286+00—900 cy), 1992 (285+00 to 286+00—300 cy), 1994 (284+00 to 286+00—1,250 cy), 1997 (285+50 to 286+00—810 cy), 1998 (285+00 to 286+00—1,000 cy), 2000 (284+50 to 285+50—1,000 cy).

Proposed Work. The work consists of removing approximately 1,300 cubic yards of sediment from an in-stream sediment basin located downstream of Piedmont Road on Berryessa Creek to restore the as-built condition. The sediment basin is located at the downstream end of a 400-foot long box culvert in an urban area, but near the upper watershed which is rural. This work will remove sediment located within the basin, immediately downstream of the basin and at the upstream entrance to the box culvert. Approximately 3 to 4 feet of sediment accumulation will be removed from the entire channel bottom.

Sediment Removal Techniques. Stream flows at this section of Berryessa Creek are normally very small during the summer months. Several hundred feet downstream of the project area the stream flows cease as they are absorbed into the stream bed. If this is the case when sediment removal operations at this site are commenced, no dewatering activities will be implemented. It is anticipated that once equipment begins excavating sediment, minimal stream flows will not escape the construction area until after the project is completed. Should stream flows be larger than anticipated, a cofferdam with gravity flow or pump bypass system will be installed to allow flows to continue past the construction area.

Heavy equipment will utilize existing access points and maintenance roads to perform sediment removal activities. Equipment can access the channel bottom using existing conditions to move sediment into stockpiles which will be removed and loaded into trucks. All materials and equipment will be stored onsite, outside the creek channel during sediment removal activities. Equipment and trucks leaving the construction area will utilize standardized flagging procedures to assist the vehicles with entering the adjacent roadways.

5. **Calabazas Creek d/s Highway 101.** *Santa Clara and Sunnyvale; Sta 44+00 - 130+00); ~30,000 cy; 75 cy temp.; Duration: ~30 days*

Watershed Description. Calabazas creek has its origin in the Santa Cruz Mountains near Stevens Creek County Park. It has several major tributary streams, including Prospect Creek, Rodeo Creek and Regnart Creek. Calabazas Creek flows through the cities of Saratoga, San Jose, Cupertino, Santa Clara, and Sunnyvale. The creek ultimately flows into the Guadalupe Slough tideflats at the Sunnyvale Baylands Park southwest of Alviso. The watershed area measured from the nearest catch point to the project is approximately 17 square miles. Within the project limits, the creek has perennial flows, and is partially tidally influenced.

Project Setting. In the project area, the channel is earthen and concrete lined and was constructed in 1997 as a flood control channel. The channel width is approximately 90 feet wide with side slopes of 2H to 1V. The channel contains dense aquatic vegetation growing in the accumulated sediment. The surrounding area is urban residential, high-tech industrial, educational, and retail.

Maintenance History. Sediment in or near the project area was removed during the following years at the noted location: 1982 (50+00 to 102+00 - 35,000 cy), 1984 (50+00 to 102+00 – 9,600 cy), 1987 (90+00 to 106+00 – 20,200 cy), 1988 (50+00 to 103+00 – unknown quantity), 1989 (50+00 to 106+00 – 4,000 cy), 1990 (50+00 to 102+00 – unknown quantity).

Proposed Work. The work consists of removing approximately 30,000 cubic yards of sediment from the improved portion of Calabazas Creek to restore the as-built condition. The limits of work will be from approximately 500-feet downstream of Tasman Drive to approximately

2,400 feet upstream of Highway 101, a length of approximately 8,600 feet. Approximately 2 to 4 feet of sediment accumulation will be removed from the entire channel bottom.

Sediment Removal Techniques. The work site must be dewatered before work begins. The goal is to bypass upstream flows downstream of the work site and to minimize any tidal influence. To dewater the site, cofferdams will be constructed upstream and downstream of the work area and flows will be routed downstream using a pump and bypass pipe system. The bypass system will be sized for the actual flows experienced at the time work is completed. Due to the length of the project site, the operation may require multiple stages of dewatering systems.

The sediment removal work will take place in the channel bottom. Equipment will push and excavate the sediment and load into dump trucks for off-site disposal. Existing access ramps will be used to access the channel and no temporary fill will be required to access the work area.

6. **Calera Creek upstream UPRR to Milpitas Blvd.** *Milpitas; Sta 2+00 - 8+50); ~600 cy; 5 cy temp.; Duration: ~7 days*

Watershed Description. Calera Creek flows from its origin in the Diablo Range in the northern portion of the Ed R. Levine County Park. From there it flows west to its confluence with Berryessa Creek, between North Milpitas Blvd. and Interstate 880. Approximately 1,000 feet below the confluence, Berryessa Creek has a confluence with Lower Penitencia Creek. It has a drainage area of 2.93 square miles upstream from the nearest catch point to the project. In this project reach, the creek has perennial flows, primarily due to urban runoff.

Project Setting. In the project area, the existing channel is concrete-lined the entire work area reach and was constructed in 1977. The U-framed concrete channel width is approximately 20 feet wide. Both sides of the channel are in industrial use. The channel itself develops vegetation in the sediment deposits.

Maintenance History. Sediment removal operations occur regularly at this location on Calera Creek. Sediment in or near the project area was removed during the following years at the noted location: 1985 (1+50 to 8+00—500 cy), 1986 (0 to 8+00—60 cy), 1987 (0 to 8+00—410 cy), 1987 (6+00 to 22+00—3,700 cy), 1989 (1+50 to 8+00—400 cy).

Proposed Work. The work consists of removing approximately 600 cubic yards of sediment between the Union Pacific Railroad crossing box culverts and Milpitas Boulevard on this freshwater section of Calera Creek. Sediment will be removed from the concrete channel invert for a distance of 650-feet. Approximately 1 to 2.5 feet of sediment accumulation will be removed from the entire channel bottom.

Sediment Removal Techniques. Stream flows for this section of Calera Creek range between 1 to 2 cubic feet per second during the summer months. During sediment removal operations, a cofferdam with gravity flow or pump bypass system will be installed to allow flows to continue downstream of the project area.

Heavy equipment will utilize an existing access point and maintenance ramp to access the bottom of the channel to perform sediment removal activities. Trucks will utilize the existing ramp to park as stockpiled sediment is loaded into trucks by equipment located in the channel bottom. All materials and equipment will be stored onsite, outside the creek channel during sediment removal activities.. Equipment and trucks leaving the construction area will utilize standardized flagging procedures to assist the vehicles with entering the adjacent roadways.

7. **Calera Creek upstream of Escuela Parkway.** *Milpitas; Sta 40+00 - 40+40; ~230 cy; 5 cy temp.; Duration: ~3 days*

Watershed Description. Calera Creek flows from its origin in the Diablo Range in the northern portion of the Ed R. Levine County Park. From there it flows west to its confluence with Berryessa Creek, between North Milpitas Blvd. and Interstate 880. Approximately 1,000 feet below the confluence, Berryessa Creek has a confluence with Lower Penitencia Creek. It has a drainage area of 2.43 square miles upstream from the nearest catch point to the project. In this project reach, the creek has perennial flows, primarily due to urban runoff.

Project Setting. In the project area, the existing channel has sacked concrete-lined side slopes and an earthen bottom and was constructed in 1977. Channel width is approximately 110 feet wide with side slopes of 2H to 1V. The project is located in the urban residential environment. There is low vegetative cover in the channel bottom, with no canopy trees. The project is located across Escuela Parkway from a school.

Maintenance History There are no previous records of sediment removal or erosion repair activities at this site.

Proposed Work. The work consists of removing approximately 230 cubic yards of sediment within the freshwater creek channel upstream of the box culverts at Escuela Parkway to restore the as-built condition. Sediment removal will occur on the channel invert for a distance of 40-feet upstream of the entrance to the box culverts at a depth of 3-feet.

Sediment Removal Techniques. Stream flows for this section of Calera Creek range between 1 to 2 cubic feet per second during the summer months. During sediment removal operations, a cofferdam with gravity flow bypass system will be installed to allow flows to continue downstream of the project area.

Heavy equipment will utilize existing access points and maintenance roads to perform sediment removal activities. Equipment can and will access the channel bottom using existing channel slopes to move sediment into stockpiles, which will be removed and loaded into trucks. All materials and equipment will be stored onsite, outside the creek channel during sediment removal activities. Equipment and trucks leaving the construction area will utilize standardized flagging procedures to assist the vehicles with entering the adjacent roadways.

8. **Canoas Creek Guadalupe River Confluence to Cottle Road.** *San Jose; Sta 0+00 - 390+00; ~1,900 cy; 20 cy temp.; Duration: ~25 days*

Watershed Description. The Canoas Creek Watershed includes approximately 18.62 square miles of drainage area defined by the Santa Teresa Hills to the south and west, and generally Monterey Highway to the north and east. Flows in the creek may persist late into the summer representing excess drainage from sub-urban landscape irrigation systems.

Project Setting. In the project area, the channel consists of a concrete-lined bottom and earthen side slopes. It was constructed in 1967 as a concrete bottom trapezoidal flood control channel. The channel width is approximately 12 feet wide with side slopes of 1.5:1.

Maintenance History. Historically, Canoas Creek has required sediment removal activities in the fall in preparation for winter storms. Since 1979, eight sediment removal projects took place over the approximate 7-mile length of the stream. The largest projects took place in 1981 and 1982 following the extreme winter storms during this period where approximately 8,000 cubic yards and 18,000 cubic yards of sediment were removed respectively. During moderate storm years such as 1993, approximately 3,000 cubic yards of sediment were removed.

Proposed Work. Work consists of removing approximately 1900 cubic yards of silt from various locations over the entire 39,000 feet (approximately 7 miles) length of this freshwater creek. Typical sediment removal activities involve chronic problem locations where spot areas, approximately 100 feet long and 10 feet wide, contain a 2-foot depth deposit of silt

Sediment Removal Techniques. The operations involve use of loaders and/or excavators working from either the channel bottom (via existing channel bottom access ramps) or top of bank maintenance road. Excavated sediment would be loaded into dump trucks, staged at the top maintenance road, and delivered to a 2.7 acre drying yard located adjacent to the creek in the vicinity of Highway 85. Once the materials are sufficiently dry, they will be offered for reuse or disposed of at a landfill.

9. **Coyote Creek upstream of the Lower Penitencia Creek Confluence.** Milpitas; Sta 454+00 - 455+50; *~150 cy sediment removal~250 cy fill; 10 cy temp.; Duration: ~20 days*

See Coyote Creek under the Bank Protection Projects; **Subsection 2.2.2.**

10. **Flint Debris Basin upstream of Mount Pleasant Road.** ***San Jose; Sta 62+00 -68+00; ~15,000*** *cy; 0 cy temp.; Duration: unknown days*

Watershed Description. Flint Debris Basin is located adjacent to Flint Creek, which flows out of the Diablo Range south of Clayton Road to its confluence with Lower Silver Creek near

Lake Cunningham. Flint Creek has a drainage area of 1.98 square miles upstream of the debris basin.

Project Setting. The basin is earthen material and was constructed in 1979. This large sediment basin was constructed as an off-stream sediment basin to intercept the large sediment load generated by the upstream unstable watershed during high stream flow events. District staff estimates that there is as much as 11 feet of deposited sediment in the basin. Consequently, the basin has limited capacity to perform its design function. Currently during periods of high flow in Flint Creek water backs up in the basin and exits the outlet structure before adequate detention of the sediment laden water.

The basin design included a low flow bypass system located within the inlet structure to the basin. During normal low flows, stream flows enter the low flow bypass without entering the basin. However, after high stream flow events sediment laden water deposits sediment within the low flow bypass. Regular maintenance of the low flow bypass system is required after the storm season to allow the low flow system to function properly. Some wetlands and other vegetation grow within the sediment in the basin during the spring season and routine vegetation management is performed under the authorization of a CDFG MOU. There is limited public access to the area.

Maintenance History. A similar scope of work as currently proposed was completed in 1998. Approximately 20,400 cubic yards of sediment was removed during the 1998 operations.

Proposed Work. The work consists of removing approximately 15,000 cubic yards of sediment from an existing sediment basin located outside the natural stream in the upper watershed. Normal operating procedures for the sediment basin allow high stream flows to enter the basin, sediment settles and detained water slowly exits the basin through the outlet structure. During the summer months, stream flows do not enter the basin. There are no surface flows within the basin. Sediment captured in this basin will be removed. It should be noted that this proposed project may not be implemented this year. Due to the large amount of sediment at this facility, the District is pursuing the acquisition of the necessary permits for removing the sediment in the event that an economically feasible reuse opportunity arises this summer. No wetlands will be removed as part of this project.

Sediment Removal Techniques. If necessary, routine maintenance of the low flow bypass will ensure that any stream flows within Flint Creek will not enter the basin. There are no surface flows within the basin during the summer. No dewatering methods are planned for this project.

Heavy equipment will utilize an existing maintenance access gate on Pleasant Knoll Drive and existing maintenance roads and ramps within the basin to setup for removing sediment. Equipment will load sediment directly into trucks for disposal offsite. All construction materials and equipment will be stored onsite. Equipment and trucks leaving the construction area will utilize standardized flagging procedures to assist the vehicles with entering the adjacent roadways.

10. **Guadalupe River, upstream Tasman to Montague.** *San Jose and Santa Clara; Sta 314+00 - 390+00; ~10,000 cy (10,000 cy planned in 2003); 50 cy temp.; Duration: ~30 days*

Watershed Description. The project is located along the lower reaches of Guadalupe River within the inter-tidal zone reaches. The 170 square mile watershed above the site includes four principal tributaries that extend into the steep forested canyons of the Santa Cruz Mountains forming the western perimeter of watershed. The watershed perimeter to the south and east, generally extending from the Santa Teresa Hills to Monterey Highway, and then along First Street to Alviso, forms the easterly perimeter of the watershed. This area consists primarily of urban and suburban uses.

Project Setting. In the project area, the existing channel is earthen with a channel width of approximately 200 feet with side slopes of 2H to 1V. The project reach was altered in the 1960s to form a channelized-leveed flood control facility. A subsequent flood control project in the 1980's raised the levees and installed two secondary channels and depressed maintenance roads immediately adjacent to the inboard side of the levees. The secondary channels function primarily for flood conveyance

Maintenance History. Historically, Guadalupe River has had three sediment removal projects within the project reach. Commencing in 1988, 12,000 cubic yards of sediment was removed from the westerly secondary channel from station 338+00 to 380+00. In 1989, 8,700 cubic yards of sediment was removed from the easterly secondary channel between stations 340+00 to 380+00. The last sediment removal project in 1990 removed 15,000 cubic yards of sediment from the westerly secondary channel.

Proposed Work. Work consists of removing approximately 20,000 cubic yards of tidally deposited silt from approximately 7,600 feet of both the easterly and westerly bypass channels in two phases. Phase one would remove 10,000 cubic yards of silt in 2001 from the westerly bypass channel, and is the emphasis of this project. Phase two would remove the remaining 10,000 cubic yards of silt from the easterly bypass channel, no sooner than 2003, and would be authorized under a separate project authorization. Excavations approximately 6 feet in depth and 25-35 feet wide are anticipated to restore flood conveyance.

Sediment Removal Techniques. The work would be accomplished in segments to minimize impacts to the channel, and is planned to commence at the upstream end near Montague Expressway where a cofferdam (if necessary) would be placed in the bypass channel inlet to prevent inflows. Sediment would be removed from the channel until the excavation came within 20 feet of the end of the segment, (where it confluence's with the natural channel). At this juncture, work on the next downstream segment would proceed with the same process, and so forth until all 4 westerly segments had sediment removed. At this juncture the inlet cofferdams would be slowly removed, and stream flows permitted to enter the bypass channel, slowly filling and settling turbidity. Once filled and settled, the 20-foot plug at the segment terminus would be removed to restore continuity between the by-pass and natural channel. By-pass channels would be filled in series to minimize turbidity in the natural channel.

The majority of the work would be accomplished from depressed maintenance roads situated immediately adjacent to the bypass channels. Work to excavate the connection between the bypass channels to the natural channel at segment ends would require equipment to enter and stage from the dewatered bypass channel utilizing timber platforms if sub-soils are weak.

Equipment to be used includes excavators, dump trucks, pumps, a generator, and cranes, accessing the site from existing driveways on local streets to the top of levee maintenance road. From this point, equipment would utilize existing ramps to the channel bottom depressed maintenance roads where the aforementioned work would be staged. All excavated sediment would be removed directly from the site and either reused or disposed at a landfill.

11. **Los Coches Creek between downstream Interstate 680 and Dempsey Rd.;** *Milpitas; Sta 8+00 - 16+00; ~1,800 cy; 30 cy temp.; Duration: ~20 days*

Watershed Description. Arroyo de Los Coches flows out of the Diablo Range east of San Jose and south of Ed R. Levine County Park. It flows to its confluence with Berryessa Creek between South Milpitas Blvd and Interstate 680. It has a drainage area of 4.02 miles upstream from the nearest catch point to the project. This creek has perennial flows.

Project Setting. In the project area, the channel is earthen and concrete lined. The channel was constructed in the late 1960's by Caltrans. The concrete box culverts beneath Interstate 680 consist of two 7-foot high by 10-foot wide boxes. The earthen section is approximately 50-feet wide with side slopes of 1.5H to 1V. The project is located in an urban residential area. The channel banks have grassy vegetation; there is no tree canopy.

Maintenance History. Sediment removal operations occur regularly at this location on Los Coches Creek. Sediment in or near the project area was removed during the following years at the noted location: — 1982 (16+00 to 17+50—70 cy), 1985 (0+00 to 16+00—1,040 cy), 1986 (14+00 to 22+00—368 cy), 1987 (0+00 to 11+00—400 cy),1990 (9+20 to 9+50—10 cy), 1992 (15+00 to 23+00—800 cy).

Proposed Work. The work consists of removing sediment located within the box culverts which contain Los Coches Creek as the freshwater creek travels under Interstate 680 and removing sediment from the open channel upstream of I-680 to Dempsey Road. Approximately 1,400 cubic yards of sediment will be removed from the two 600-foot long box culverts located under I680. Approximately 400 cubic yards of sediment will be removed from the earthen and concrete-lined section of the open channel located between I680 and Dempsey. The open channel is 200 feet in length. Sediment removal activities will restore the as built condition. The sediment in the box culvert may not be removed by the District if Caltrans is found to have maintenance responsibility.

Sediment Removal Techniques. Construction activities will require stream flows to be diverted around the work area. A gravity flow or pumped bypass system will be installed. Stream flows will be diverted into one box culvert cell at a time while the other box culvert is cleaned. It will be necessary to install a cofferdam upstream of the box culverts to block unregulated flows from entering the box culverts during sediment removal operations and to allow equipment access into the channel bottom.

Heavy equipment will utilize an existing maintenance access gate on Dempsey Road and existing maintenance road to setup for sediment removal activities. Equipment will work within the channel to stockpile sediment and load sediment directly into trucks for disposal offsite. All construction materials and equipment will be stored onsite, outside the creek channel during sediment removal activities. Equipment and trucks leaving the construction area will utilize standardized flagging procedures to assist the vehicles with entering the adjacent roadways. In addition to the normal sediment removal equipment, it will be necessary to install large fan systems to ensure that fresh air (supply for breathing) is available within the box culverts during construction activities. The fan systems will be installed at the downstream end of the box culverts.

12. **Matadero Creek, Highway 101 to Louis Road.** *Palo Alto; Sta 91+00 - 122+00; ~4,000 cy; 30 cy temp.; Duration: ~15 days*

Watershed Description. Matadero Creek has its origin in the Santa Cruz Mountains above the Town of Los Altos Hills. It flows north out of these mountains and through the City of Palo Alto. The creek ultimately flows into the Palo Alto Flood Basin immediately northeast of Highway 101. The watershed area from the nearest catch point to the project is approximately 14 square miles. Within the project limits, the creek has perennial flows and is influenced by the tide basin.

Project Setting. In the project area, the channel is earthen and concrete-lined, and was constructed in 1999 as a flood control channel. The channel width varies from approximately 20 to 40 feet wide with side slopes of 1H to 1V. The channel contains aquatic vegetation growing in the accumulated sediment. The surrounding area is urban residential.

Maintenance History. Since 1979, sediment in or near the project area was removed approximately 18 times. An average of approximately 2,000 cubic yards of sediment was removed per event.

Proposed Work. The work consists of removing approximately 4,000 cubic yards of sediment from the improved portion of Matadero Creek to restore the as-built condition. The limits of work will be from approximately 200 feet downstream of Highway 101 to approximately 200 feet upstream of Louis Road, a length of approximately 3,100 feet. Approximately 1 to 3 feet of sediment accumulation will be removed from the entire channel bottom.

Sediment Removal Techniques. The work site must be dewatered before work begins. The goal is to keep tide basin flows out of the work site and to bypass upstream flows downstream of the work site. To dewater the site, cofferdams will be constructed upstream and downstream of the work area and flows will be routed downstream using a pump and bypass pipe system. The bypass system will be sized for the actual flows experienced at the time work is completed. Due to the length of the project site, the operation may require multiple stages of dewatering systems. As an alternative method of dewatering, local storm drain systems may be used to divert flows. If this is done, stream flows would be pumped into the storm drain at Louis Road to divert flows to Adobe Creek.

The sediment removal work will take place in the channel bottom. Equipment will push and excavate the sediment and load into dump trucks for off-site disposal. Between Highway 101 and Greer Road, an excavator may work from the top of bank to remove sediment. Existing access ramps will be used to access the channel and no temporary fill will be required to access the work area.

13. **Randol Creek upstream ~~and downstream~~ of Bret Harte Drive.** *San Jose; Sta 29+00 - 29+50; ~50 cy; 5 cy temp.; Duration: ~3 days*

Watershed Description. The proposed project is located in the lower reaches of Randol Creek approximately one mile upstream of its confluence with Alamitos Creek. Randol Creek has a watershed area of approximately four square miles originating in the steep canyons of the Santa Cruz Mountains, where approximately 80% of its drainage area resides within Quick Silver County Park, formerly the historic New Almaden Mining District.

Project Setting. In the project area, the channel is earthen and was constructed in circa 1975. The channel width is approximately 10 feet wide with side slopes of 1.5:1. The creek up and down stream of the culvert was historically improved as a trapezoidal flood control facility.

Maintenance History. Historically, Randol Creek has one sediment removal project in the project area in 1986, where approximately 1,200 cubic yards of sediment were removed from the channel downstream of the Bret Hart Culvert over a distance of 2500 feet.

Proposed Work. Work consists of removing approximately 50 cubic yards of silty-gravel and cobbles from the upstream and downstream concrete channel bottom aprons of the Bret Harte Drive Culvert to a depth of approximately 2 feet.

Sediment Removal Techniques. Work will be accomplished from the top of bank maintenance road with an excavator and dump trucks. The site is likely to be dry during the sediment removal project, but if flows are present they will be bypassed via a coffer dam and pipe or pump system.

14. **Ross Creek upstream ~~and downstream~~ of Cherry Ave.** *San Jose; Sta 30+00 - 30+50; ~100 cy; 0 cy temp.; Duration: ~3 days*

Watershed Description. The proposed project is located in the lower reaches of Ross Creek approximately one mile upstream of its confluence with Guadalupe River. Ross Creek has a watershed area of approximately 9.96 square miles originating in the steep canyons of the Santa Cruz Mountains, where approximately 30% of its drainage area drains naturally to the creek.

Project Setting. In the project area, the channel is earthen and was constructed in circa 1975. The channel width is approximately 10 feet wide with side slopes of 1.5 H to 1V. The creek up and down stream of the culvert was historically improved as a trapezoidal flood control facility. The bridge at Cherry Avenue is offset from the stream alignment and includes abrupt transitions which create eddies and backwaters that rapidly accumulates sediment.

Maintenance History. Since 1985, Ross Creek, in the project area, has had four sediment removal projects where approximately 300 cubic yards of sediment was removed during each project.

Proposed Work. Work consists of removing approximately 100 cubic yards of gravel from the upstream concrete channel bottom apron of the Cherry Ave. Culvert to a depth of approximately 1-2 feet.

Sediment Removal Techniques. In the event sediment removal activities are scheduled during periods when the stream is flowing with low turbidity, BMPs involving flow bypasses and cofferdams will be employed to minimize downstream increases.

16. Rucker Creek downstream of Guibal Avenue. *Gilroy; Sta 57+30 - 58+30); ~30 cy sediment removal ; ~60 cy fill; 5 cy; Duration: ~5 days*

See Rucker Creek under the Bank Protection Projects, **Subsection 2.2.2.**

17. Sierra Creek downstream of Mauna Kea. *San Jose; Sta 60+00 - 73+00); ~850 cy; ~~0~~ 5 cy temp.; Duration: ~8 days*

Watershed Description. Sierra Creek flows out of the foothills of the Diablo Range, to the south of Sierra Road, east of San Jose. The entire reach of this creek is within the urban area. Adjacent to the project, it drains an urban area of less than one square mile.

Project Setting. At this location, Sierra Creek exits a 54-inch pipeline into an open concrete channel. The concrete section is 70 feet in length before transitioning into an earthen section. Sediment routinely settles at this location. The channel improvements were constructed in the late 1960's and the earthen channel width is approximately 4 feet wide with side slopes of

1.5H to 1V. There is urban residential development on both sides of the channel. Some grasses grow in the sediment deposits in the channel.

Maintenance History. Sediment removal operations occur regularly at this location on Sierra Creek. Sediment in or near the project area was removed in the following years at the noted location: 1980 (60+00 to 72+00—580 cy), 1982 (60+00 to 72+00—570 cy), 1986 (0+00 to 72+00—2,080 cy), 1998 (73+00 to 73+03—150 cy), 1999 (73+00 to 82+00—1,750 cy).

Proposed Work. The work consists of removing approximately 850 cubic yards of sediment from within the Sierra Creek channel located downstream of Mauna Kea. The work will restore the as-built condition in this freshwater creek along approximately 1,300 foot reach. This work will remove approximately 4 feet of sediment on the concrete-lined section and between 4 feet and 1 foot of sediment along the rest of the channel.

Sediment Removal Techniques. The work area is typically wet or has very low flow due to urban runoff during the summer season. Several hundred feet downstream of the work area, the stream flows absorb into the stream bed. If this is the case when sediment removal operations commence, no dewatering activities will be implemented. Should stream flows be larger than anticipated, a cofferdam with gravity flow or pump bypass system will be installed to allow stream flows to continue past the work area.

Heavy equipment will utilize an existing access point at Mauna Kea Lane to access the existing maintenance road to perform sediment removal activities. Trucks will utilize the existing road to park as stockpiled sediment is loaded into trucks by equipment located on the same road. All materials and equipment will be stored onsite, outside the creek channel during sediment removal activities. Equipment and trucks leaving the construction area will utilize standardized flagging procedures to assist the vehicles with exiting the maintenance road and entering Mauna Kea Lane.

2.2 BANK PROTECTION

Bank protection activities consist of in-kind bank repairs (i.e., replacing earth with earth, rock with rock, etc.), biotechnical methods that incorporate biological features such as root wads in with standard engineering methods, or limited use of hard structures, such as concrete, rock, sacked concrete, and gabions. Table 1 summarizes key features of the project activities. **Appendix B** includes a set of project plans, cross sections, location maps, and photos for each of the bank protection activities. **Section 2.3** outlines Best Management Practices (BMPs) that will be implemented during the project.

2.2.1 General Description

The following is a general description of the bank protection sites:

1. The type of heavy equipment typically used includes excavators, bulldozers, cranes, dump trucks, compactors, heavy equipment transport trucks, loaders, motor graders, and water trucks. Other equipment, such as pumps, generators and bypass pipes may be used as necessary.

2. Vehicles will access the sites by using local streets and highways, and the existing maintenance roads along the channels, except where otherwise noted. If new temporary access is required, BMP #15 will be applied.

3. All sites will comply with the conditions of Section 401 waivers, CDFG MOU for improved and unimproved channels or individual 1601s and NWPs.

4. In the eroded scarp areas, minor excavation occurs to establish a firm bank as part of the bank protection activity. Footings are excavated and filled with rock, logs, or concrete, for example. Earth fill and/or native soil/material is compacted to approximately 85-90 percent. For improved channel banks with levees, earthfill conforms to general engineering specifications for embankment fill.

2.2.2 Detailed 2001 SMP Descriptions

Fifteen bank protection (erosion repair) projects are included in the 2001 SMP, all of which are nontidal, except for Coyote Creek, Guadalupe Slough, Guadalupe River and Lower Penitencia Creek. Erosion repairs are proposed along approximately 9965 linear feet of channel (approximately 1.9 miles). Table 2 summarizes the amount and type of materials proposed to be used for each erosion repair project. The following erosion repair projects also include sediment removal as an ancillary activity to bank protection, and are included in this section: Coyote Creek and Rucker Creek.

The following is a detailed description of each bank protection site. The project location (descriptive and by station numbers (there is 100 feet between each station number), amount of permanent/temporary fill (temp) material in cubic yards (cy) within Corps jurisdiction, and duration (approximate working days) follows each location. The following abbreviations are used: u/s is upstream and d/s is downstream. The work site area that will be planted with native riparian shrubs and trees (watershed specific, if possible) is shown under the heading "Rip. Veg." This rip-veg planting is in addition to the work indicated in the project descriptions.

1. **Calabazas Creek at Quarry Road.** *Saratoga; Sta 643+00 -644+30); 15 cy; 5 cy temp.; Duration: ~8 days*

   Watershed Description. Calabazas Creek has its origin in the Santa Cruz Mountains near Stevens Creek County Park. It has several major tributary streams, including Prospect Creek, Rodeo Creek and Regnart Creek. Calabazas Creek flows through the cities of Saratoga, San Jose, Cupertino, Santa Clara, and Sunnyvale. The creek ultimately flows into the Guadalupe Slough tideflats at the Sunnyvale Baylands Park southwest of Alviso. The watershed area measured from the nearest catch point to the project is approximately 2 square miles.

Project Setting. In the project area, this section of Calabazas Creek is a natural stream, which has perennial flow. The channel width is approximately 12 feet wide with side slopes of 1H to 1V. The vegetation in the project area is primarily oak riparian woodland. The surrounding area is low density residential.

Maintenance History. The District has no history of erosion repair maintenance in this area since 1987. The nearest historic erosion repair work is located in the reach approximately 4,500 feet downstream of the project area.

TABLE 2
2001 SMP Erosion Repair Projects – Materials Used

	Creek-Location	Length	Total surface area (finished)	Proposed Concrete	Proposed Rock	Proposed Earthen	Rip. Veg	Other Veg
	Erosion Repair							
1	Calabazas Creek at Quarry Road	30	600	0	330	270	270	0
2	Canoas Creek u/s of Blue Jay Dr.	20	432	0	432	0	0	0
3	Canoas Creek u/s of Hillsdale Ave	1000	32000	0	28000	4000	0	4000
4	Coyote u/s Lower Penitencia Confl.	150	1800	0	1350	450	0	450
5	E. Little Llagas San Martin to Church	7000	420000	0	0	420000	0	420000
6	Guadalupe Slough at Baylands	50	1060	0	180	880	0	880
7	Los Gatos Creek u/s of Lincoln Ave	200	7400	0	1400	6000	0	6000
8	Lower Penitencia d/s Redwood	315	7000	0	0	7000	0	7000
9	Matadero Creek at Josina Avenue	100	127	127	0	0	0	0
10	Rucker Creek d/s Guibal	100	780	0	180	600	0	600
11	San Tomas Ck u/s McCoy Ave	550	3675	0	1575	2100	2100	0
12	Stevens Creek at Clearcreek Ct. (Site A)	100	840	80	400	360	360	0
13	Stevens Creek at Clearcreek Ct. (Site B)	100	1700	0	900	800	360	440
14	Stevens Creek at Highway 85	50	1465	0	565	900	360	540
15	Thompson d/s Pettigrew Ct.	200	3940	0	80	3860	3420	440
	Totals	9965	482819	207	35392	447220	6870	440350
	Percents		100%	0.04%	7.33%	92.63%	1.43%	91.20%

Legend

1. Rip Veg = riparian plantings on slopes
2. Other Veg = hydro-seeding, woody debris, etc.

NOTES

1. All areas shown are in Square Feet
2. Areas are for channel slopes and bottom; does not incude access roads
3. All areas are approximate

Proposed Work. The work consists of installing approximately 30 linear feet of rock rip-rap slope protection. The work is required to prevent further erosion, which could threaten Quarry Road. The top of bank is immediately adjacent to the roadway.

Bank Protection Techniques. The work site must be dewatered before work begins. The goal is to bypass upstream flows downstream of the work site. To dewater the site, a cofferdam will be constructed upstream of the work area and flows will be routed downstream using a pump and bypass pipe system. The bypass system will be sized for the actual flows experienced at the time work is completed.

Access to the project site will be from Quarry Road. Heavy equipment will work from the roadway at top of bank to complete the work. One-way traffic control will be required.

2. **Canoas Creek upstream of Bluejay Drive.** *San Jose; Sta 55+00 - 55+20; ~10cy; 5 cy temp.; Duration: ~3 days*

Watershed Description. The Canoas Creek Watershed includes approximately 18.62 square miles of drainage area defined by the Santa Teresa Hills to the south and west, and generally Monterey Highway to the north and east. Flows in the creek may persist late into the summer representing excess drainage from suburban landscape irrigation systems. Soils that form the Canoas Creek Channel are weak and very erodible.

Project Setting. In the project area, the channel consists of a concrete-lined bottom and earthen side slopes. It was constructed in 1967 as a concrete bottom trapezoidal flood control channel. The channel width is approximately 12 feet wide with side slopes of 1.5H to 1V.

Maintenance History. Historically, Canoas Creek has had chronic erosion problems. Past erosion repair projects have emphasized hardscape structural approaches to address these weak soils and target creek functions, limited to flood control. The earlier projects utilized sacked concrete riprap for the full slope of the creek bank, later projects emphasized soil covered rock revetment for the majority of the creek bank slope with an engineered fill cap. The latter projects were seeded with a select grass mix suitable within urban settings. Since 1991, Canoas Creek has had four significant erosion repair projects placing approximately 1100 feet of rock revetment and 150 feet of sacked concrete rip rap. Nine minor erosion repair projects involved placement of approximately 200 feet of earth bank repair and 100 feet of wooden retaining wall repair.

Proposed Work. Work consists of installing approximately 10 cubic yards of rock and soil to repair approximately 20 feet along the west bank of the creek.

Bank Protection Techniques. Construction will be staged from the top of the bank maintenance road with equipment including excavators, compactors, dump trucks, pumps and generators. Once the creek is dewatered, the excavators will initially excavate a 3-foot deep cut-off trench adjacent to the concrete channel bottom, and place one tone boulders as a foundation for engineered fill and rock revetment to follow. The engineered fill will be placed in 6-inch lifts and compacted to 95% relative density. After several lifts are in place, rock revetment will be installed on the reconstructed bank surface. This sequence of earth bank reconstruction and rock revetment placement will continue until the design elevation is reached, conforming to the elevation of the maintenance road, where soil will be placed over the rock revetment and seeded.

3. **Canoas Creek Upstream of Hillsdale Ave.** *San Jose; Sta 90+00 - 100+00; ~1,000 cy; 5 cy temp.; Duration: ~30 days*

   Watershed Description. The Canoas Creek Watershed includes approximately 18.62 square miles of drainage area defined by the Santa Teresa Hills to the south and west, and generally Monterey Highway to the north and east. Flows in the creek may persist late into the summer representing excess drainage from suburban landscape irrigation systems. Soils that form the Canoas Creek Channel are weak and very erodible.

   Project Setting. In the project area, the channel consists of a concrete-lined bottom and earthen side slopes. It was constructed in 1967 as a concrete bottom trapezoidal flood control channel. The channel width is approximately 12 feet wide with side slopes of 1.5H to 1V.

   Maintenance History. Historically, Canoas Creek has had chronic erosion problems. Past erosion repair projects have emphasized hardscape structural approaches to address these weak soils and target creek functions, limited to flood control. The earlier projects utilized sacked concrete riprap for the full slope of the creek bank, later projects emphasized soil covered rock revetment for the majority of the creek bank slope with an engineered fill cap. The latter projects were seeded with a select grass mix suitable within urban constraints. Since 1991, Canoas Creek has had four significant erosion repair projects placing approximately 1100 feet of rock revetment and 150 feet of sacked concrete rip rap. Nine minor erosion repair projects involved placement of approximately 200 feet of earth bank repair and 100 feet of wooden retaining wall repair.
   Proposed Work. Work consists of installing approximately 5,000 cubic yards of rock and soil to repair approximately 1000 feet along the east and west bank of the creek.

   Bank Protection Techniques. Construction will be staged from the top of the bank maintenance road with equipment including excavators, compactors, dump trucks, pumps and generators. Once the creek is dewatered, the excavators will initially excavate a 3-foot deep cut-off trench adjacent to the concrete channel bottom, and place one ton boulders as a foundation for engineered fill and rock revetment to follow. The engineered fill will be placed in 6-inch lifts and compacted to 95% relative density. After several lifts are in place, rock revetment will be installed on the reconstructed bank surface. This sequence of earth bank reconstruction and rock revetment placement will continue until the design elevation is reached, conforming to the elevation of the maintenance road, where soil will be placed over the rock revetment and seeded.

4. **Coyote Creek upstream of the Lower Penitencia Creek Confluence.** *Milpitas; Sta 454+00 - 455+50; ~150 cy sediment removed; 250 cy fill; 10 cy temp.; Duration: ~20 days*

   Watershed Description. The Coyote Creek is a major drainage running generally southeast to northwest. It currently originates at Anderson Reservoir in the Diablo Range east of Morgan Hill, and runs approximately 30 miles to its mouth in the tide flats of San Francisco Bay. The watershed is 321.62 square miles upstream from the nearest catch point to the project. This section of Coyote Creek is tidal influenced.

Project Setting. The bank erosion project is located upstream of Dixon Landing Road and is subject to tidal influence. The project area is located west of the majority of urban residential development. To the west are several salt evaporation ponds and District mitigation area that is being reclaimed from former salt evaporation ponds. In addition, there is industrial use on reclaimed land to the north.

Maintenance History. This site on Coyote Creek is adjacent to the area where the annual summer dam, Standish Dam, was previously installed. No previous erosion repairs or sediment removal activities have occurred at this location.

Proposed Work. The work consists of installing rock riprap and earthen material to repair an eroded bank which has eliminated vehicle passage on an existing maintenance road and is threatening the adjacent levee. Approximately 150 cubic yards of sediment will be removed from the area adjacent to the slope repair area to accommodate the construction of the bank repair. The total length of the bank protection work is approximately 150 feet in this tidal influenced section of Coyote Creek requiring approximately 250 cy of fill. The work will restore the as-built condition.

Bank Protection Techniques. The mean high higher water surface elevation is approximate 5 to 6 feet deep in the channel. The work area will be inundated by the tide during construction activities. Actual work, including sediment removal and repair measures will occur during low tide periods when the work area is outside of the flowing water. This approach will limit the available work period to a couple of hours each low tide period. A small bladder dam, sandbags or other material may be installed around the work area to increase the amount of time the work area is outside the tidal influence. Pumps may be used to keep the work area dewatered.

Heavy equipment will utilize existing maintenance access points and roads to setup for removing sediment and erosion repair measures. During construction, a ramp will be built into the erosion scour area and equipment will move back and forth within the scour area. No equipment will operate within the live creek channel. Equipment will also be stationed on the lower maintenance road to perform both operations outside of the normal creek flow area. All materials and equipment will be stored onsite, outside the creek channel during construction activities, outside of the creek channel. Equipment and trucks leaving the construction area will utilize standardized flagging procedures to assist the vehicles with entering the adjacent roadways.

5. **E. Little Llagas Creek San Martin Avenue to Church Avenue.** *San Martin; Sta 28+00 - 98+00; ~0 cy; 0 cy temp.; Duration: ~12 days*

Watershed Description. East Little Llagas and West Little Llagas are essentially the same channel. The dividing line is at the Union Pacific Railroad Tracks between Maple Avenue and East Middle Avenue. The channel flows under U.S. Highway 101 where it meets the constructed

Madrone Channel and turns south. The earthen trapezoidal channel, constructed in 1971, also served as flood control for lands east of Highway 101. The watershed is 24.49 square miles upstream from the nearest catch point to the project.

Project Setting. In the project area, the channel is width is approximately 60 feet wide with side slopes of 2H to 1V. This project is located in a rural area characterized by agricultural and low density residential uses. The channel section contains grasses except in the area that has experienced head cutting, which is devoid of vegetation.

Maintenance History. The entire length of the work area has experienced severe headcutting as a result of the washout of a grade control structure at Church Avenue (at the downstream end of the proposed project) during high storm flows several years ago. The resulting vertical banks of an incised channel along the entire project length are actively eroding during the winter storm flow season. The grade control structure was reconstructed in August 2000. Approximately 500 feet of the channel invert was regraded during the reconstruction of the grade control structure project. Other than the recontouring of the 500 feet above the grade control structure, no other sediment removal or erosion repair projects have occurred in the recent past.

Proposed Work. The work consists of regrading the channel bottom, when the channel is dry, to eliminate the vertical banks and to create a more stable channel invert along a 7,000 foot segment of the creek. Heavy equipment will reconfigure the existing channel soil to stabilize sections of the channel where down cutting has caused unstable erosion conditions. Existing channel material will be moved into the scoured areas and a shallow low flow channel will be developed. No soil stabilizing methods or materials are proposed for the East Little Llagas Creek project. A similar scope of work occurred near Church Avenue during the construction of the grade control structure.

Bank Protection Techniques. This section of East Little Llagas Creek is a freshwater creek that is normally dry during the summer and fall months. Since the creek is normally dry during the summer and fall months, no dewatering methods are proposed for this project.

Heavy equipment will utilize existing maintenance access points and roads to access the work area. Equipment will access the channel bottom by utilizing the existing channel slope as a ramp. All materials and equipment will be stored onsite, outside the creek channel during construction activities. Equipment and trucks leaving the construction area will utilize standardized flagging procedures to assist the vehicles with entering the adjacent roadways.

6. **Guadalupe Slough at Baylands.** *Sunnyvale; Sta 315+00 - 315+50; ~ 30 cy; 0 cy temp.; Duration: ~12 days*

Watershed Description. Guadalupe Slough is a channel within the San Francisco Bay tideflats and receives the flows of San Tomas Creek, Calabazas Creek, and Sunnyvale East and West outfall channels. The slough ultimately flows into San Francisco Bay north of the salt evaporation ponds approximately six miles downstream of the project site. The entire slough has tidal flows.

Project Setting. In the project area, the channel is earthen with levees and was most likely constructed in the 1950's for flood control. The channel width is approximately 60 feet wide with side slopes of 1-1/2H to 1V. The channel contains dense aquatic vegetation growing in tidal sediments at the base of the levee. The area is surrounded by Baylands Park to the southwest and salt evaporation ponds to the north. Immediately south of the project area is an upland pond which interacts with the slough via an outfall structure. The repair of this damaged outfall structure is a key component to this project.

Maintenance History. The District has no history of erosion repair maintenance in this area since 1987. The nearest historic erosion repair work is located in a reach approximately three miles downstream of the project area.

Proposed Work. The work consists of repairing a damaged outfall structure and eroded levee bank. The length of the project is approximately 50 linear feet. The work will include reconstructing the earthen levee bank, replacing the outfall pipe, and installing rock rip rap slope protection below the outfall.

Bank Protection Techniques. The work site must be isolated from freshwater and tidal channel flows. A sheetpile cofferdam will be used to isolate the project area from channel flows. The sheetpile structure will be installed in the channel in a semi-circular layout around the work area. Any water contained in the work area will be pumped into the channel with discharge protection.

Access to the project site will be from the Guadalupe Slough levees. Heavy equipment will access the work area from the top of levee. No additional temporary fill will be required for access. The project is along a section of the San Francisco Bay Trail. Safety signage and pedestrian traffic control will be required.

7. **Los Gatos Creek Upstream of Lincoln Ave.** *San Jose; Sta 115+00 - 117+00; ~300 cy; 10 cy tem.; Duration: ~30 days*

Watershed Description. The proposed project is located on the west bank of Los Gatos Creek approximately two miles upstream of it confluence with Guadalupe River. Los Gatos Creek has a watershed area of approximately fifty-four square miles originating in the steep canyons of the Santa Cruz Mountains, where approximately 80% of its drainage area resides above Lenihan Dam. Below Lenihan Dam the stream flows along its approximate ten mile length before confluencing with Guadalupe River in Downtown San Jose.

Project Setting. In the project area, the channel is natural earthen on the southeast bank and gabions on the northwest bank, which were constructed in 1997 for flood control. The channel width is approximately 40 feet wide with side slopes of 1H to 1V. The neighborhood is primarily single- family residential.

Maintenance History. A variety of historical erosion repair projects have been installed. These include sacked concrete rip-rap, concrete rubble, rock revetment, concrete bulk-heads/retaining walls, and gabions. The 1977 gabion construction project installed approximately four hundred feet of slope protection on a steep eroding northwest bank slope, extending from the bottom of the channel to the top of bank. Since 1987, Los Gatos Creek has had fourteen significant erosion repair projects placing approximately 2200 feet of rock revetment and 150 feet of sacked concrete rip rap.

Proposed Work. Work consists of removing approximately 1000 cubic yards of soil and damaged gabion rock filled baskets, regrading the channel bank and installing approximately 300 cubic yards of boulders to rehabilitate approximately 200 feet of collapsed bank along the west side of this fresh water creek, historically improved to provide slope protection. The boulders would be placed in the creek bed in the same location where the damaged gabions presently are situated next to a pool. The pool, and the configuration of the damaged gabions overhanging it, provides aquatic habitat for Salmonids known to be present in this creek. The boulders would be placed in a configuration next to the pool to replace the aforementioned aquatic habitat once the damaged gabions are removed. Interstitial spaces between the boulders would be planted with riparian cuttings to promote overhanging growth enhancing the habitat value over that of aforementioned aquatic habitat associated with the damaged gabions.

Critical portions of the collapsed gabions are anticipated to be removed, likely involving work in the creek bed. The slumped bank slope above the toe of bank would have the damaged gabions removed, and the bank slope reconstructed to conform to the stable gabions situated beyond the damage perimeter. The bank areas would then be planted with erosion resistant vegetation and landscaped.

The proposed project is designed as an interim repair for a damaged gabion slope protection project constructed in 1977. The area of present concern involves a 150-foot segment situated in the upstream portion of the 1977 project, where the engineered fill beneath the gabion surface slumped downward approximately ten feet, and horizontally an estimated six feet into the creek bed. The gabions on either side of this slump remain intact, and serve to restrain the interconnected displaced rows of stepped gabions that slid, and presently bulge and overhang the low flow channel. Although this configuration has essentially remained unchanged since the collapse in 1998, the consequent scarp at head of the slide continues to erode and raise concerns over upper bank stability. The District is currently advancing a Capital Improvement Project to effectively define underlying causes necessary to design and construct an effective long-term solution. Since this effort will require a substantial investigation, the objective of this interim project is to address present slope stability and related safety concerns.

Bank Protection Techniques. Construction activities for the worst-case project would require the use of heavy equipment including excavators, compactors, dump trucks, tractors, cranes, pumps and a generator. Materials include approximately 200 cubic yards of 3-5 foot boulders and 100 cubic yards of imported earth engineered fill. Onsite soils and gabions rocks will be reused on site. The remedial measures developed involve heavy construction equipment activities staging adjacent to, or on unstable slopes in the immediate vicinity of residential property. The District is in the process of securing additional rights-of-way in order to provide access for heavy equipment.

Work will commence with installation of an access ramp from the Twinbrooks cul-de-sac to the or lower bank slope at a point approximately six feet above the creek bed at the upstream end of the project. At this juncture, an excavator or tractor would commence construction of a approximately 10 feet wide staging terrace situated along the bank, preceding downstream to the limits of the slope collapse. This terrace construction would involve removal and or reconfiguration of the slumped gabions, including excavations and load testing to assess slope and foundation conditions. Silt fences would be installed between the work and the live stream. In the event problematic foundation conditions are encountered, their extent would be determined, and the site dewatered to accommodate extension of the ramp to the channel bottom where a boulder foundation would be installed.

The probable dewatering plan involves placing a 10 CFS submersible electric pump in the live stream near the aforementioned access ramp, and extending a 10" hose along the creek bed to a point approximately 300 feet downstream of the construction envelope. Coffer dams would be placed at either end of the construction envelope to control flows. Any turbid seepage originating from excavations would be settled through straw bail or geotextile impoundments situated in the creek bed above the cofferdam to reduce turbidity downstream of site. All access to the site is planned from Twinbrooks Ct. where a traffic control and security plan will be implemented. The project has been scheduled to commence no sooner than July, and be completed prior to November, to avoid presence of Salmonids as much as possible. Fish surveys prior to and during construction will be conducted by qualified biologists to determine Salmonid or other species presence. If fish are present, they will be relocated so there will not be any significant impact to the species from construction. (See BMP #18.)

8. **Lower Penitencia Creek downstream of Redwood Avenue.** *Milpitas; Sta 67+00 - 70+15; ~100 cy; 180 cy temp.; Duration: ~18 days*

Watershed Description. Lower Penitencia Creek historically originated in the Diablo Range east of San Jose and Milpitas. It now flows from near Montague Expressway north to its confluence with Coyote Creek near San Francisco Bay. The drainage area of Lower Penitencia Creek to the confluence with Berryessa Creek is 5.16 square miles upstream from the nearest catch point to the project.

Project Setting. In the project area, the channel is earthen and was constructed in 1984 for flood control. The channel width is approximately 70 feet wide with side slopes of 1.5H to 1V. The channel section has been stabilized with grasses. The levee roads in this vicinity are very narrow. On the opposite side of the levee from the project area is a school and tennis courts.

Maintenance History. The erosion site was previously repaired in 1998 using similar construction methods without installing dewatering measures. The previous work was constructed without impacting the wetted portion of the creek. There are no other previous records of sediment removal or erosion repair activities at this site.

Proposed Work. The work consists of repairing two erosion sites located within the Lower Penitencia Creek levee which were previously repaired in 1998. The two sites are approximately 200 feet in length. Since the previous earthen repair is slumping into the channel, the project proposes to install dewatering measures, remove the earthen material placed during the previous repair, excavate the foundation material (approximately 100 cubic yards) and replace it with engineered fill to restore the as-built condition on this tidal influenced creek.

Bank Protection Techniques. This section of Lower Penitencia Creek is tidal influenced. To minimize the influence of water within the erosion repair area, cofferdams will be installed upstream and downstream of the work area. Pipe will be installed within the creek channel prior to constructing the cofferdams and the cofferdams will be constructed around the pipe. The pipe will allow the creek flows and tidal influence to move upstream and downstream of the work area while the erosion repair work is underway.

Heavy equipment will utilize existing maintenance access points and roads to access the work area. Equipment will construct cofferdams for the water diversion and an access ramp from the lower maintenance road to the channel bottom and erosion area located on the opposite bank. Equipment will work within the channel bottom around the diversion pipe while performing repair measures. Existing levee and slope material will be excavated to remove unstable material and assist in creating a firm foundation for the levee. Excavated material will be removed from the site if found unsuitable for rebuilding the levee or stored onsite until reused to rebuild the levee. All other materials and equipment will be stored onsite, outside of the creek channel during repair operations. Equipment and trucks leaving the construction area will utilize standardized flagging procedures to assist the vehicles with entering the adjacent roadways

9. **Matadero Creek at Josina Avenue.** *Palo Alto; Sta 219+00 - 220+00; ~15 cy; 10 cy temp.; Duration: ~13 days*

Watershed Description. Matadero Creek has its origin in the Santa Cruz Mountains above the Town of Los Altos Hills. It flows north out of these mountains and through the City of Palo Alto. The creek ultimately flows into the Palo Alto Flood Basin immediately northeast of Highway 101. The watershed area from the nearest catch point to the project is approximately 8 square miles. Within the project limits, the creek has perennial flows.

Project Setting. In the project area, this section of Matadero Creek is a natural stream with various bank protection measures installed over many years. The channel width is approximately 12 feet wide with varying side slopes. The surrounding area is urban residential.

Maintenance History. Significant bank protection measures were installed in the project area by the District in 1980 as part of a capital maintenance project. The measures installed were primarily sacked-concrete slope protection. Sacked concrete was also installed at two sites in 1987 and 1992. Shotcrete slope protection was installed at one site in 1988.

Proposed Work. The work consists of repairing damage to a concrete retaining wall. The length of the project is approximately 100 linear feet. The wall was most likely installed in the late 1950's as part of the adjacent residential development. The work includes deepening the existing wall footing using drilled concrete piers or helix soil anchors and a concrete stem wall. The stem wall will extend two feet below the existing channel invert.

Bank Protection Techniques. The work site must be dewatered before work begins. The goal is to bypass upstream flows downstream of the work site. To dewater the site, a cofferdam will be constructed upstream of the work area and flows will be routed downstream using a pump and bypass pipe system. The bypass system will be sized for the actual flows experienced at the time work is completed.

The project site will be reached via an existing concrete access ramp to the channel located approximately 500 feet upstream of the work area. The ramp is located at the rear of Barron Park Elementary School. An easement through the school enables access. If possible, work will be scheduled during summer to minimize impacts to school children and families.

10. **Rucker Creek downstream Guibal Avenue.** *Gilroy; Sta 57+30 - 58+30; 30 cy sediment removed; ~60 cy fill; 5 cy temp; Duration: ~5 days*

Watershed Description. Rucker Creek is a small tributary of Llagas Creek that flows out of the foothills of the Diablo Range west of Coyote Lake County Park to its confluence with Llagas just north of Buena Vista Avenue to the northeast of Gilroy. The area drained for all of Rucker Creek is 2.24 square miles upstream from the nearest catch point to the project. It is an intermittent stream, normally dry in the summer and fall months.

Project Setting. In the project area, the channel is earthen and was constructed in the early 1980's. The channel width is approximately 4 feet wide with side slopes of 2H to 1V. This section of Rucker Creek is located above the 96-inch diameter Santa Clara Conduit, which is a major water supply pipeline for Santa Clara County. The surrounding area is characterized by agricultural and low density residential uses.

Maintenance History. There are no previous records of sediment removal or erosion repair activities at this site.

Proposed Work. This proposed work is required to protect an existing maintenance service vault for the pipeline. The work consists of repairing eroded channel banks and removing sediment adjacent to the service vault from an earthen section of Rucker Creek. Approximately 30 cubic yards of sediment will be removed from the channel along this 100 reach of creek. The work will rebuild the eroded area with approximately 60 cy of earthen material and install class light rock along the rebuilt slope near the service vault to protect and restore the as-built condition in this freshwater creek.

Bank Protection Techniques. This section of Rucker Creek is normally dry during the summer months and therefore no dewatering methods are planned. Should stream flow be present when construction begins a coffer dam and gravity flow or pumped bypass system will be installed.

Heavy equipment will utilize the existing shoulder of road located along Rucker Avenue to setup for removing sediment and constructing erosion repair measures. Equipment will load sediment directly into trucks for disposal offsite. All construction materials and equipment will be stored onsite.

11. **San Tomas Creek u/s McCoy Avenue.** *Campbell; Sta 589+00 - 594+50; ~150 cy; 10 cy temp.; Duration: ~18 days*

Watershed Description. San Tomas Creek has its origin in the Santa Cruz Mountains within the El Sereno Open Space Preserve. The creek flows northeast on the border between the towns of Saratoga, Monte Sereno, and Los Gatos, and north through the cities of Campbell, San Jose and Santa Clara until it joins Guadalupe Slough. The watershed measured from the nearest catch point to the project is approximately 9 square miles.

Project Setting. In the project area, the channel is earthen and was improved in 1975 for flood control. The channel width is approximately 50 feet wide with side slopes of 1H to 1V. The channel consists of a "natural" low-flow creek with set-back levee and floodwall. Within the project limits, the creek has predominately intermittent flows, although urban runoff has a significant influence. The vegetation in the project area is primarily oak riparian woodland. The surrounding area is urban residential and educational.

Maintenance History. Since the channel was improved in 1975, only one erosion repair maintenance project has been completed. Sacked-concrete slope protection was installed at that site in 1987.

Proposed Work. The work consists of three elements. At two locations, a total of approximately 210 linear feet of rock rip-rap slope protection will be installed to prevent further erosion into a levee bank. Immediately upstream of this location, a series of vortex rock weirs will be installed to raise and stabilize the channel invert. This is required to protect exposed footings of existing sacked-concrete slope protection and a failing drop structure. An existing maintenance ramp will be removed in connection with the erosion repair element of the work.

Bank Protection Techniques. The work area is typically dry during the Summer construction season. If necessary, however, the work site will be dewatered if flows are present. The goal is to bypass upstream flows downstream of the work site. To dewater the site, a cofferdam will be constructed upstream of the work area and flows will be routed downstream using a pump and bypass pipe system. The bypass system will be sized for the actual flows experienced at the time work is completed.

Access to the project site will be from an existing access ramp to the channel. This ramp is located within Erosion Site 1, and will be removed with the project.

12. Stevens Creek at Clearcreek Court (Site A). *Cupertino; Sta 496+00 – 497+00; ~55 cy; 65 cy temp.; Duration: ~18 days*

Watershed Description. Stevens Creek originates in the Santa Cruz Mountains near the intersection of Page Mill Road and Skyline Boulevard. It flows southeast along the San Andreas rift zone, then north through the cities of Cupertino, Los Altos, Sunnyvale, and Mountain View to San Francisco Bay. Stevens Creek dam and reservoir are operated by the District southwest of Cupertino. The watershed area above the nearest catch point to the project is approximately 20 square miles.

Project Setting. In the project area, this section of Stevens Creek is a natural stream The channel width is approximately 13 feet wide with side slopes of 1H to 1V. Within the project limits, the creek has perennial flows and is influenced by reservoir flow releases. The vegetation in the project area is primarily oak riparian woodland. The surrounding area is urban residential.

Maintenance History. The District has no history of erosion repair maintenance in this area since 1987. The nearest historic erosion repair work is located in the reach approximately one mile downstream of the project area.

Proposed Work. The work consists of repairing damage to a section of concrete slope protection and erosion damage immediately upstream. The length of the project is approximately 100 linear feet. The slope protection was installed as storm drain outfall protection in the early 1960's as part of the adjacent residential development. The work includes deepening the concrete slope protection footing and installing rock rip-rap slope protection.

Bank Protection Techniques. The work site must be dewatered before work begins. The goal is to bypass upstream flows downstream of the work site. To dewater the site, a cofferdam will be constructed upstream of the work area and flows will be routed downstream using a pump and bypass pipe system. The bypass system will be sized for the actual flows experienced at the time work is completed.

Access to the work area will be via a lower floodplain area and the channel. Access to the floodplain area will be via an existing ramp through private property. If this is unavailable, the channel will be accessed at the upstream side of Stevens Creek Boulevard. Temporary fill in the amount of approximately 50 cubic yards will be required to access the work areas. All temporary fill used will be removed and the access point will be stabilized upon completion of the work.

13. Stevens Creek at Clearcreek Court (Site B). *Cupertino; Sta 499+00 - 500+00; ~90 cy; 65 cy temp.; Duration: ~12 days*

Watershed Description. Stevens Creek originates in the Santa Cruz Mountains near the intersection of Page Mill Road and Skyline Boulevard. It flows southeast along the San Andreas rift zone, then north through the cities of Cupertino, Los Altos, Sunnyvale and Mountain View to

San Francisco Bay. Stevens Creek dam and reservoir are operated by the District southwest of Cupertino. The watershed area above the nearest catch point to the project is approximately 34 square miles.

Project Setting. In the project area, this section of Stevens Creek is a natural stream. The channel width is approximately 18 feet wide with side slopes of 1H to 1V. Within the project limits, the creek has perennial flows and is influenced by reservoir flow releases. The vegetation in the project area is primarily oak riparian woodland. The surrounding area is urban and residential.

Maintenance History. The District has no history of erosion repair maintenance in this area since 1987. The nearest historic erosion repair work is located in the reach approximately one mile downstream of the project area.

Proposed Work. The work consists of installing approximately 100 linear feet of hybrid rock rip-rap slope protection. The work is required to prevent further erosion into residential property and to protect a large sycamore tree.

Bank Protection Techniques. It is anticipated that work on Site B will be completed concurrent with Site A. The same dewatering and access techniques will be used for Site B.

14. Stevens Creek at Highway 85. *Mountain View; Sta 315+00 - 315+50; ~50 cy; 70 cy temp.; Duration: ~24 days*

Watershed Description. Stevens Creek originates in the Santa Cruz Mountains near the intersection of Page Mill road and Skyline Boulevard. It flows southeast along the San Andreas rift zone, then north through the cities of Cupertino, Los Altos, Sunnyvale and Mountain View to the San Francisco Bay. Stevens Creek dam and reservoir are operated by the District southwest of Cupertino. The watershed area above the nearest catch point to the project is approximately 34 square miles.

Project Setting. In the project area, this section of Stevens Creek is a natural stream with various bank protection measures installed over many years. The channel width is approximately 14 feet wide with side slopes of 1H to 1V. Within the project limits (during the summer construction season), creek flows are highly influenced by reservoir flow releases. Depending on reservoir operations, the project area may or may not have flows. The vegetation in the project area is primarily oak riparian woodland. The surrounding area is urban residential and adjacent to the Route 85 freeway corridor.

Maintenance History. Significant bank protection measures were installed in the project area by the District in the early 1980's as part of a capital maintenance project. The measures installed were rock rip-rap and sacked-concrete slope protection. Rock rip-rap was also installed at two sites in 1991 and 1994.

Proposed Work. The work consists of installing approximately 50 linear feet of hybrid rock rip-rap slope protection. The work is required to prevent further erosion, adjacent to Highway 85. The top of bank is currently 10 feet from the highway soundwall.

Bank Protection Techniques. The work site must be dewatered before work begins. The goal is to bypass upstream flows downstream of the work site. To dewater the site, a cofferdam will be constructed upstream of the work area and flows will be routed downstream using a pump and bypass pipe system. The bypass system will be sized for the actual flows experienced at the time work is completed.

Access to the project site will be from a staging area along Highway 85. The staging area will be accessed from an existing gate along Highway 85. An encroachment permit from Caltrans will likely be required. Traffic control will be completed per Caltrans standards for equipment and trucks exiting and entering freeway lanes, including preparation of a Traffic Management Plan (TMP) for Caltrans review.

The project site will be reached via an access ramp to the channel located approximately 200 feet upstream of the work area. The access ramp will be located at the site of a remnant ramp previously used for access. Temporary fill in the amount of approximately 50 cubic yards will be required to access the work area. All temporary fill used will be removed and the access point will be stabilized upon completion of the work.

15. **Thompson Creek downstream of Pettigrew Court.** *San Jose; Sta 37+50 - 39+50; ~270 cy; 10 cy temp.; Duration: ~20 days*

Watershed Description. Thompson Creek flows out of the Diablo Range, near Mt. Misery, to its confluence with Lower Silver Creek approximately .5 miles south of Lake Cunningham. The drainage is 17.30 square miles upstream from the nearest catch point to the project.

Project Setting. In the project area, the channel is earthen and the adjacent flood improvement levee was constructed in 1989. The channel width is approximately 8 feet wide with side slopes being nearly vertical. The area around the project is suburbanized. The flood control is accomplished with setback levees. On the opposite bank there is an open field flood plain. The project area was once an orchard. Since the channel is deeply incised, the top of bank vegetation predominates. The vegetation is primarily oak riparian woodland adjacent to an abandoned black walnut grove in the project area.

Maintenance History. There are no previous records of sediment removal or erosion repair activities at this site.

Proposed Work. The work consists of repairing erosion damage along a short section of Thompson Creek. The erosion damage is threatening the adjacent levee. Down-cutting action in the channel invert has caused a sacked concrete outfall structure to fail and has undermined several trees adjacent to the failed outfall structure. The work will affect both banks of this freshwater creek and is approximately 200 feet in length. The work will replace the sacked concrete outfall structure with a rock rip-rap structure, construct a log crib wall structure to recreate the pre-erosion channel bank, lay back the upper 4-feet of the existing vertical channel bank to reduce instability and create planting zones, and install rock vortex weirs to stabilize the channel bottom.

Bank Protection Techniques. Since the creek is normally dry during the summer and fall months, no dewatering methods are proposed for this project.

Heavy equipment will utilize existing maintenance access points to access the floodplain area located between the existing levees and the work area. Equipment will drive across the floodplain area to access the work area. The grass and weedy vegetation located within the floodplain area is disked during the summer months to reduce the fire threat and in compliance with local fire regulations. No existing trees or shrubs will be removed or damaged as a result of vehicles or equipment driving across the floodplain or accessing the work area. Equipment will construct an access ramp to the channel bottom to access the work area. Equipment will work within the channel bottom and from the top of bank to construct erosion repair measures. Excavated material will be removed from the site if found unsuitable for rebuilding the eroded bank or stored within the floodplain area until reused. All other materials and equipment will be stored onsite, outside of the creek channel during repair operations. Equipment and trucks leaving the construction area will utilize standardized flagging procedures to assist the vehicles with entering the adjacent roadways

2.3 BEST MANAGEMENT PRACTICES

Best management practices (BMPs) are methods, measures, or practices that avoid, reduce or minimize a project's effects on various resources. BMPs include, but are not limited to structural and nonstructural controls and operation and maintenance procedures. BMPs can be applied before, during, and after activities to reduce or eliminate environmental impacts. BMPs are part of the project design and/or constitute routine procedures of the District. In contrast, mitigation measures are developed separate from the project design to address specific environmental impacts.

BMPs incorporated into the 2001 SMP description for sediment removal and bank protection activities are identified in Table 3. Not all of the BMPs listed below are for potentially significant effects. Many BMPs are included to further reduce less-than-significant impacts to even lower impact levels as part of the District's commitment to environmental stewardship. In addition, work will also be performed using BMPs as listed in the District's most current Best Management Practices Plan (SCVWD, 1999), which can provide more specific details for specific sites.

The BMPs included in Table 3 will be incorporated into work plans for the sites, where and when appropriate. Table 4 identifies the BMPs that will be implemented for each project and indicates which activity the BMP is appropriate for; wither sediment removal (SR), bank protection (BP), or both (Both) activities.

TABLE 3
2001 SMP Best Management Practices for Bank Protection and Sediment Removal

BMP	Title	Description	Activity
1. Water Quality--The District shall implement measures to protect water quality, to reduce short-term increases in turbidity, and to maintain the geomorphic integrity of the channels.			
1	Tidal Work Areas	For tidal areas, a downstream cofferdam is constructed to prevent the work area from being inundated by tidal flows. By isolating the work area from tidal flows, water quality impacts are minimized. Downstream flows continue through the work area and through pipes within the cofferdam. a) Installation of coffer dams will begin at low tide. b) If work can be completed or staged when the work area is not under water, coffer dams will not be necessary.	Both
2	Dewater/ Bypass Water at Non-tidal Sites	If water is present at the work site, diversion structures (which can be made of various materials) will be constructed, as needed, to isolate the work area and avoid or minimize downstream water quality impact. Depending on the channel configuration, water is allowed to either continue flowing downstream or is diverted around the work site in a pipe (pumped or gravity) or open channel. a) All water shall be discharged in a non-erosive manner (e.g., gravel or vegetated bars, on hay bales, on plastic, on concrete, or in storm drains when equipped with filtering devices, etc.). b) Sumps or basins may also be used to collect water, where appropriate (e.g., in channels with low flows). c) Where feasible and appropriate, diversion structures shall be installed on concrete sections of the channels or constructed of materials other than imported earthen fill. If earth is used, the downstream and upstream faces shall be covered by a protected covering (e.g., plastic or fabric) if needed to minimize erosion. d) In conjunction with diversion structures, pumps or gravity-fed pipe systems are used to dewater sites. e) Depending on the channel configuration, sediment removal may occur within a live stream where the flows are not bypassed around the work site; however, during excavation activities, a berm of sediment is left between the work area and stream flows to minimize water quality impacts.	Both
3	Avoid Erosion When Restoring Flows	All temporary diversion structures shall be removed. Flows shall be restored in a manner that minimizes erosion. a) When diversion structures are removed, to the extent practicable, the ponded flows will be directed into the low-flow channel within the work site to minimize downstream water quality impacts. b) Flows shall gradually be restored to the channel to avoid a surge of water that would cause erosion or scouring. c) Bypassed flows can be slowly reintroduced into the dewatered area by leaving a silt barrier in place to allow water to slow and drop sediment to the extent possible.	Both
4	Erosion and Sediment Control Measures	Erosion control methods shall be used as appropriate during the construction phase to control sediment and minimize water quality impacts. The District shall prevent erosion on steep slopes by using erosion control material according to manufacturer's specifications. Appropriate measures include, but are not limited to, the following: a) Silt Fences b) Straw Bale Barriers c) Brush or Rock Filters d) Storm Drain Inlet Protection	BP

TABLE 3
2001 SMP Best Management Practices for Bank Protection and Sediment Removal

BMP	Title	Description	Activity
		e) Sediment Traps f) Sediment Basins g) Erosion Control Blankets and Mats The following Bay Area Stormwater Management Agency Association BMPs provide guidance and specifications as to implementation of the erosion control measures described: SC-3. Sediment Basins SC-4. Straw or Sand Bag Barriers SC-5. Sediment Traps SC-6. Silt Fences SS-1. Erosion Control Blankets, Mats, and Geotextiles VR-1. Brush or Rock Filters VR-2. Check Dams VR-4b. Temporary Outlet Protection VR-4b. Storm Drain Inlet Protection WD-1. Earth Dike WD-1. Slope Drain WD-3. Temporary Drains and Swales	
5	Use of Wheel and Track Mounted Vehicles in Stream Bottoms	District personnel shall use the appropriate equipment for the job that minimizes disturbance to the stream bottom. Appropriately-tired vehicles, either tracked or wheeled, shall be used depending on the situation: a) Use of tracked vehicles shall focus on selecting low ground pressure equipment and, when possible, avoiding areas where channel topography would be unduly impacted by equipment. b) When possible, tracked equipment will be chosen in lieu of wheeled vehicles in areas where soil types are highly susceptible to compaction.	Both
6	Pump/ Generator Set Operations and Maintenance	Pumps and generators shall be maintained and operated in a manner that minimizes impacts to water quality and aquatic species. a) Pumps and generators shall be maintained according to manufacturer's specifications to regulate flows to prevent dryback or washout conditions. b) Pumps shall be operated and monitored to prevent low water conditions, which could pump muddy bottom water, or high water conditions, which creates ponding. c) Pump intakes shall be screened to prevent uptake of fish and other vertebrates.	Both
7	Pump intake clearance structure	Pump clearance systems will be used in creeks fines at the pump intake location. Mount pump to pallet or other suitable base platform to provide clearance from channel bottom, which will reduce high velocity around pump intake.	Both

TABLE 3
2001 SMP Best Management Practices for Bank Protection and Sediment Removal

BMP	Title	Description	Activity
8	Fabric-lined Invert Upstream of Bypass Pump	In streams with ponded water, where pumping action increases velocity in the upstream channel and project inspection shows increased mobilization of sediment fines in flow, filter fabric will be laid in the channel bottom and secured upstream of bypass pump where sediment is mobilizing. Field judgment will be used to determine where sediment is mobilizing.	Both
9	Handle Sediments So As to Minimize Water Quality Impacts	Sediments shall be stored and transported in a manner that minimizes water quality impacts. a) Wet sediments may be stockpiled outside of a live stream or may be stockpiled within a dewatered stream so water can drain or evaporate before removal. This measure is dependent upon the availability of a stockpile site. b) Temporary stockpiles will be isolated. c) Trucks may be lined with an impervious material (e.g., plastic), or the tail gate blocked with dry dirt or hay bales, for example, or trucks may drain excess water by slightly tilting their loads and allowing the water to drain out. d) Water shall not drain directly into channels (outside of the work area) or onto city streets without providing water quality control measures. e) Streets shall be cleaned of mud and/or dirt by street sweeping, as necessary, and not by hosing down the street.	SR
10	Soil Stockpiles	If soil is to be stockpiled, no run-off will be allowed to flow back to creek outside of the work area in which water quality BMPs have been implemented.	SR
11	Avoid Exposing Soils with High Mercury Levels	Bank Protection projects in portions of the Guadalupe River watershed affected by historical mercury mining may expose soils containing mercury which can affect stream water quality. In the specified channel reaches in the Guadalupe River Basin, soils that are likely to be disturbed or excavated shall be tested for Mercury (Hg). Soils shall be remediated if: a) Disturbed or excavated soils exposed to flood flows below the 2.33-year channel flow level exceed 1 ppm Hg, or b) Disturbed or excavated soils above the 2.33-year flow level exceed 20 ppm Hg. C. Remediation can be accomplished either by: 1) treating the site so that contaminated soils excavated for the purpose of installing bank protection will not be susceptible to erosion, or 2) by further excavating contaminated soils and replacing them with clean fill or other bank protection materials that are free from contaminants.	BP
12	Concrete Use Near Waterways	Concrete that has not been cured is alkaline and can increase the pH of the water; fresh concrete will be isolated until it no longer poses a threat to water quality. a) Use plastic sheeting or otherwise isolate concrete that is used in channels for 2 weeks to one month to allow time for curing. b) Designate an area outside of the channel and floodplain to clean out concrete transit vehicles.	BP

TABLE 3
2001 SMP Best Management Practices for Bank Protection and Sediment Removal

BMP	Title	Description	Activity
13	Groundwater Management	If high levels of groundwater in a work area are encountered, the water may be pumped out of the work site. If necessary to protect water quality, the water shall be directed into specifically constructed infiltration basins, into holding ponds, or onto areas with vegetation to remove sediment prior to the water re-entering a creek.	Both
14	Prevent Scour Downstream of Sediment Removal	Sites in the transport zone on alluvial fans may cause increased scour downstream if they experience rapid sediment accumulation after sediment removal. Channel reaches up to 500 feet downstream from such sediment removal sites will be monitored to determine whether accelerated erosion is occurring. If downstream monitoring indicates that erosion is occurring, then remedial action such as rock vortex weirs or similar protection shall be carried out.	SR
2. Vegetation -- The District shall strive to minimize vegetation removal and shall revegetate sites as appropriate to provide erosion control and restore riparian habitat value.			
15	Minimize Stream Access Impacts	District personnel shall use existing access ramps and roads where possible. If new access points are necessary, they shall be constructed in a manner that minimizes impacts to streams: a) New access points shall be created as close to the work area as possible to minimize running equipment down stream channels. b) On temporary access points, remaining disturbed soil shall be compacted and re-vegetated as soon after construction as is horticulturally appropriate. c) New access points will be constructed so as to minimize adverse impacts, such as tree removal, whenever possible. d) If the access point is to be permanent, the road or ramp will have a gravel surface. e) Any temporary fill used for access shall be removed upon completion of the project. Channel topography and geometry shall be restored to pre-project conditions to the extent possible.	Both
3. Wildlife and Fisheries -- The District shall implement measures to minimize impacts to native species, especially special-status and riparian dependant species.			
16	Minimize Impacts to Special-status Plants and Animals Via Site Assessments and Avoidance Measures	To avoid and minimize impacts to special-status plant and wildlife species, the annual work program shall be reviewed, and each site where special status species have been found, have been known to exist in the recent past, or are likely to occur because suitable habitat exists, will be visited by a biologist or qualified personnel under the direction of a biologist. For animal species the site surveys will be no more than 30 days prior to the start of construction to determine presence of special-status species. For plant species the surveys will be conducted during the appropriate time of the year to determine presence. Information regarding the presence of special-status species on a particular worksite shall be based on the District's GIS database and professional experience of qualified staff. a) If maintenance activities are scheduled in the vicinity of extant populations, qualified personnel under the direction of a biologist will clearly identify the populations on site and stake or flag a buffer zone	Both

TABLE 3
2001 SMP Best Management Practices for Bank Protection and Sediment Removal

BMP	Title	Description	Activity
		around the population in which activities are to be avoided. b) If sensitive animals such as western pond turtles or California red-legged frogs are found, a qualified biologist will remove them to suitable habitat outside of the project limits. Moving animals will be consistent with applicable Fish and Wildlife Service and Fish and Game permits. c) The results of all sensitive species surveys will be reported to the Fish and Wildlife Service and the California Department of Fish and Game in an annual report. All surveys will be reported to the CNDDB.	
17	Minimize Impacts to Breeding Birds Via Site Assessments and Avoidance Measures	Work will be conducted in a manner consistent with the protocols established by the most current version of the District's Nesting Migratory Bird Procedure: a) Project areas will be checked by qualified personnel under the direction of biologists for nesting birds prior to starting work if the work has the potential to impact breeding birds. b) If nesting birds are found, implementation of a project may be delayed until after nesting is completed. Work may occur if an adequate buffer, as determined by a qualified biologist, can be established between the maintenance activity and nests.	Both
18	Salvage Native Aquatic Vertebrates from Dewatered Channels	If fisheries or native aquatic vertebrates are present when cofferdams, water bypass structures, and silt barriers are to be installed, a fish and native aquatic vertebrate relocation plan will be implemented to ensure that fish and native aquatic vertebrates are not stranded: a) In non-tidal channels, where water is to be diverted, prior to the start of work or during the installation of water diversion structures, native aquatic vertebrates will be captured in the work area and transferred to another reach as determined by a qualified biologist b) Aquatic invertebrates will not be transferred (other than incidental catches) because of their anticipated abundance and colonization after completion of the repair work.	Both
19	Minimize Effects of Bypass Structures on Steelhead	To prevent increases in temperature and decreases in dissolved oxygen (DO), if bypass pipes are used, they shall be properly sized (i.e., larger diameter pipes to better pass the flows). Bypass pipes may also be avoided by creating a low-flow channel or using other methods to isolate the work area.	Both
20	Conduct In-Channel Work During the Dry Season	Avoid and minimize impacts to steelhead or fall-run Chinook salmon by timing stream maintenance projects in streams where there are or could be steelhead or Chinook salmon so that ~~the use of heavy equipment~~ sediment removal and bank stabilization work in the channel is conducted outside of the migration and spawning season in creeks or portions of creeks that support steelhead or fall-run Chinook salmon . a) Steelhead and fall-run Chinook salmon migration and spawning season is generally between ~~December~~ October 15 to June 15 ~~30~~. b) Any variance shall be in accordance with California Department of Fish and Game or National Marine Fisheries Service requirements, restrictions or condition.	Both
21	Remove Temporary Fills as Appropriate	Temporary fills, such as for access ramps, diversion structures, or cofferdams, shall be completely removed upon finishing the work, except where clean river run cobble/gravel was used. When appropriate, some or	Both

TABLE 3
2001 SMP Best Management Practices for Bank Protection and Sediment Removal

BMP	Title	Description	Activity
		all of such material may be left in the channel to provide a substrate for aquatic species.	
22	Restore Riffle and Pool Configuration of Channel Bottom	The District shall re-grade the channel bottom at the end of the work project to as close to original conditions as possible. a) In areas used for migration by salmonids as designated on the District GIS Fisheries coverage, the depth and size of the low flow channel and pools shall emulate the pre-construction conditions as closely as possible, within the finished channel topography. b) In areas potentially used for spawning by salmonids as designated on the District GIS Fisheries coverage, spawning riffles impacted by channel maintenance activities will be re-created by placement of a suitably sized gravel-cobble mixture in a configuration that equals or exceeds the pre-project available area (see also BMP ~~22~~ 21).	Both
4. Land Use and Public Safety -- The District shall minimize disturbance to the public and ensure public safety.			
23	Notify Local Governments of Scheduled Work	Notify cities and the County of proposed work by submitting the Annual Work Plan to the Public Works Departments and the District's Zone Advisory Committee.	Both
24	Minimize Disturbances to Surrounding Neighborhoods	The District shall implement maintenance practices that minimize disturbances to neighborhoods surrounding work sites. a) In general, work shall be conducted during normal working hours. Extending weekday hours and working weekends may be necessary to complete some projects. b) Internal combustion engines shall be equipped with adequate mufflers. c) Excessive idling of vehicles will be prohibited. d) Levee traffic shall be limited to a speed of 15 miles per hour. e) Access roads shall be watered as needed to control dust. f) Dry sediment shall be wetted down or covered as needed to control dust during transport.	Both
25	Stabilized Construction Entrance	The District shall implement measures to minimize soil from being tracked onto streets near work sites: a) Methods used to prevent mud from being tracked out of work sites onto roadways include installing a layer of geotextile mat, followed by a 4-inch thick layer of 1to 3-inch diameter gravel on unsurfaced access roads where necessary; extensive sweeping can be substituted where there are stable road surfaces in the access. b) Access shall be provided as close to the work area as possible, using existing ramps where available and planning work site access so as to minimize disturbance to the creek bed, creek banks, and the surrounding land uses.	Both
26	Sanitary/Septic Waste Management	Temporary sanitary facilities shall be located on jobs that last multiple days. All temporary sanitary facilities shall be placed outside of the creek channel and floodplain.	Both
27	Vehicle and Equipment Cleaning	District vehicles shall be washed only at the approved area in the corporation yard. No washing of vehicles shall occur at job sites.	Both

TABLE 3
2001 SMP Best Management Practices for Bank Protection and Sediment Removal

BMP	Title	Description	Activity
28	Work Site Solid Waste Management	District employees and contractors shall clean the work site before leaving by removing all litter and construction related materials. The District's maintenance crews shall be responsible for all debris incurred as a result of construction and for cleaning up dumped material.	Both
29	Implement Public Safety Measures	The District shall implement public safety measures during maintenance: a) Construction signs shall be posted at job sites warning the public of construction work and to exercise caution. b) When necessary, a person shall be provided for traffic control. c) If needed, a lane shall be blocked off to allow for trucks to pull into and out of the access points. d) Where work is proposed adjacent to a recreational trail, warning signs shall be posted several feet beyond the limits of work. e) Fencing, either the orange safety type or chain link, shall be installed above repair sites on bank stabilization projects. f) Where projects are adjacent to schools, hours of ingress and egress to the site shall avoid peak periods of school traffic in the morning and afternoon to the maximum extent possible.	Both
5. Air Quality-- The District shall implement dust control measures at work sites to protect air quality and minimize effects on adjacent neighborhoods.			
30	BAAQMD Basic Dust Control Measures	The District shall implement BAAQMD Basic Control Measures at maintenance sites less than four acres in size. Current measures stipulated by the BAAQMD CEQA Guidelines include the following: a) Active maintenance areas shall be watered at least twice per day unless soils are already sufficiently moist to avoid dust. b) Trucks hauling sediments and other loose material shall be covered or shall maintain at least two feet of freeboard. c) Tailgates of trucks shall be sealed. d) Trucks shall be brushed down before leaving the maintenance site. e) Unpaved access roads and staging areas that are being used for the maintenance activity shall be watered three times daily, or non-toxic soil stabilizers shall be applied to control dust generation. f) Paved maintenance site access roads shall be swept when visible soil material is carried onto the roadway.	Both
31	BAAQMD Enhanced Dust Control Measures	For single maintenance sites greater than four acres, the District shall implement BAAQMD Enhanced Dust Control Measures. These measures include the following: a) Inactive areas shall be sprayed with soil stabilizer or seeded. b) Exposed stockpiles shall be watered, enclosed, covered, or sprayed with soil stabilizers. c) Traffic speeds shall be limited to 15 mph. d) Sandbags or other bank protections shall be installed to prevent silt runoff to roadways. e) Vegetation in disturbed areas shall be replanted as soon as horticulturally appropriate. For example, plant material may not be ready as soon as the job is done (e.g. willow cuttings have to be collected during winter dormancy).	Both

TABLE 3
2001 SMP Best Management Practices for Bank Protection and Sediment Removal

BMP	Title	Description	Activity
32	Avoid Stockpiling Potentially Odorous Sediments	Some of the sediment removal sites will have sediment that is rich in organic matter decaying in an anaerobic condition, which generates assorted malodorous gases, such as reduced sulfur compounds. These sediments shall be handled in a manner that avoids impacting sensitive receptors. a) The District shall avoid stockpiling potentially odorous sediments within 1000 feet of residential areas or other odor sensitive land uses. b) Where appropriate, odorous stockpiles shall be disposed of at an appropriate landfill.	SR
6. Hazardous Materials -- The District shall implement hazardous materials protocols to protect environmental quality and public safety.			
33	Spill Prevention	The District shall prevent the accidental release of chemicals, fuels, lubricants, and non-storm drainage water into channels. a) District field personnel will be appropriately trained in spill prevention, hazardous material control, and clean-up of accidental spills. b) No fueling, repair, cleaning, maintenance, or vehicle washing shall be performed in the creek channel or in areas at the top of the channel bank that may flow into the creek channel unless adequate portable containment procedures are implemented.	Both
34	Spill Kit Location	Spill prevention kits shall always be in close proximity when using hazardous materials (e.g., crew trucks and other logical locations). a) Prior to entering the work site, all field personnel will know the location of spill kits on crew trucks and at other locations within District facilities. b) All field personnel will be advised of these locations and trained in their appropriate use.	Both
35	Hazardous Waste Management	The District shall implement measures to ensure that hazardous materials are properly handled and the quality of water resources is protected by all reasonable means when removing sediments from the streams. a) Prior to entering the work site, all field personnel will know how to respond when toxic materials are discovered. b) The discharge of any hazardous or non-hazardous waste as defined in Division 2, Subdivision 1, Chapter 2 of the California Code of Regulations shall be conducted in accordance with applicable State and federal regulations. c) All handling and disposal of sediments shall be performed in accordance with the WDR issued by the RWQCB. The sediment shall ultimately be disposed at a permitted landfill. Any alternative use or disposal will require RWQCB approval.	Both
36	Vehicle and Equipment Fueling	No fueling shall be done in the stream channel and floodplain. Except, fixed equipment (such as pumps and generators) that are placed for extended periods during a job can be fueled in place provided that containment is accomplished per BMP 33. All mobile equipment (such as trucks, excavators, loaders, etc.) shall be pulled or driven out of the channel and floodplain areas for refueling.	Both

TABLE 3 2001 SMP Best Management Practices for Bank Protection and Sediment Removal			
BMP	**Title**	**Description**	**Activity**
37	Vehicle and Equipment Maintenance	No equipment servicing shall be done in the stream channel and floodplain. Except, fixed equipment (such as pumps and generators) that are placed for extended periods during a job can be serviced in place provided that containment is accomplished per BMP 34. All servicing of equipment will be done so that hydrocarbon based lubricants are not introduced into areas that may run into the stream.	both
7. Cultural Resources -- The District will protect cultural resources.			
38	Discovery of Cultural Remains or Historical Artifacts – previously improved channels	If historic or archaeological resources are uncovered during project implementation, all work shall stop and the District shall retain a qualified archaeologist. All workers who will be assigned to the projects shall attend an orientation to archaeological evidence so that they will be equipped to make preliminary identification of potential archaeological issues. The archaeologist will perform an archaeological reconnaissance and develop mitigation measures to protect archaeological resources pursuant to BMP 39.	Both
39	Discovery of Cultural Remains or Historic Artifacts – previously unimproved channels	In unimproved channels, and where historical or archaeological artifacts are found, work in areas where remains or artifacts are found will be restricted or stopped until proper protocols are met. a) Work at the location of the find will halt immediately within 30 feet of the find. If an archaeologist is not present at the time of the discovery, SCVWD will contact an archaeologist for identification and CEQA evaluation. b) If the find is not significant, construction can continue. The archaeologist will prepare a brief informal memo/letter that describes and assesses the significance of the resource, including a discussion of the methods used to determine significance for the find. c) If the find appears significant, the archaeologist will determine if the resource can be avoided and will detail avoidance procedures. d) If the resource cannot be avoided, the archaeologist will develop within 48 hours an Action Plan to avoid or minimize impacts. The SCVWD field crew will not proceed until the Action Plan is approved by the SCVWD Watershed Manager. e) The recovery effort will be detailed in a report prepared by the archaeologist in accordance with current archaeological standards. Any non-grave artifacts will be placed with an appropriate repository. f) In the event of discovery of human remains, the field crew supervisor shall take immediate steps to secure and protect such remains. g) The Santa Clara County Coroner shall be notified and informed of the find and of any efforts made to identify the remains as Native American. If the remains are determined to be from a prehistoric Native American, the medical examiner is responsible for contacting the Native American Heritage Commission (NAHC) within 24 hours of notification. The NAHC then designates and notifies within 24 hours a *Most Likely Descendant* (MLD). The MLD has 24 hours to consult and provide recommendations for the treatment or disposition, with proper dignity, of the human remains and grave goods. h) Preservation in situ is the preferred option, and if the District can do this without incurring potential future disturbance, then the MLD will usually recommend no further action. The remains and artifacts will be documented and the find location carefully backfilled to avoid further disturbance.	Both

TABLE 3
2001 SMP Best Management Practices for Bank Protection and Sediment Removal

BMP	Title	Description	Activity
		i) Human remains or cultural items exposed during maintenance that are subject to further disturbance will be exhumed archaeologically at the discretion of the MLD and reburied with the concurrence of the MLD in a place mutually agreed upon by all parties.	

TABLE 4 – BMPS PER PROJECT

	2001 Stream Maintenance Projects	1. Water Quality													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Sediment Removal														
1	Adobe Cr. at Highway 101	P	P	S	S	P	P	S		P	P			S	
2	Berryessa Cr. Milpitas Blvd. to Calaveras	P		P	S	S	S	S	S	P	P			P	
3	Berryessa Cr. Cropley to Sierra Cr. Confl.		S	S	S	P	S	S	S	P	P			S	
4	Berryessa u/s & d/s Piedmont		S	S	S	P	S	S	S	P	P			S	S
5	Calabazas Cr. d/s Highway 101	S	P	P	S	P	P	S	S	P	P			S	
6	Calera u/s UPRR		P	P	P		P	P	P	P	P				
7	Calera u/s Escuela Parkway		P	P	P	P	S	S	S	P	P			S	
8	Canoas Cr. Guadalupe Confl. to Bernal Ave		P	P	S		P	S	S	P	P				
9	Coyote Cr. u/s Lower Penitencia Confl.	P		S	S					P	P			S	
10	Flint Debris Basin, u/s Mt. Pleasant Rd.		S	S	S	S	S	S	S	P	P			S	
11	Guadalupe u/s Tasman to Montague	P		P	S		S	S		P	P				
12	Los Coches d/s I - 680 to Dempsy		P	P	P	P	P	S	S	P	P			P	
13	Matadero Creek, Hwy 101 to Louis	P	P	P	S	P	P	S	S	P	P			S	
14	Randol u/s Brete Harte (from just u/s Brete Harte)		P	P	S		P	S	S	P	P			S	
15	Ross u/s of Cherry (from just u/s cherry)		P	P	S		P	S	S	P	P			S	
16	Rucker Creek d/s Guibal		S	S	S		S	S	S	P	P			S	
17	Sierra Creek d/s Mauna Kea		S	S	S		S	S	S	P	P			S	
	Bank Stabilization														
1	Calabazas Creek at Quarry Rd.		P	P	P	P	P	S	S					S	
2	Canoas u/s Blue Jay (from d/s Dow)		P	P	P		S	S	S					S	
3	Canoas Creek u/s Hillside Ave.		P	P	P		S	S	S					S	
4	Coyote Cr. u/s Lower Penitencia Confl.	P		P	S					P	P			S	
5	E. Little Llagas San Martin to Church					P									
6	Guadalupe Slough at Baylands	P	P	S	P	P	S	S	S					P	
7	Los Gatos u/s Lincoln (from d/s Meridian)		P	P	P		S	S	S					S	
8	Lower Penitencia d/s Redwood	P		P	P	P	S	S	S		P			P	
9	Matadero Creek at Josina Ave.		P	P	S	P	P	S	S				P	S	
10	Rucker Creek d/s Guibal		S	S	S		S	S	S	P	P			S	
11	San Tomas Creek u/s McCoy Ave.		S	S	P	P	S	S	S					S	
12	Stevens Cr. at Clearcreek Ct. (Site A)		P	P	P	P	P	S	S					S	
13	Stevens Cr. at Clearcreek Ct. (Site B)		P	P	P	P	P	S	S					S	
14	Stevens Creek at Highway 85		P	P	P	P	P	S	S					S	
15	Thompson d/s Pettigrew Ct.		S	S	S	P	S	S	S		P		P	P	

Notes:

1. See Table 3 for BMP definitions
2. "P" indicates the BMP that most probably applies based on anticipated site conditions when the work will occur
3. "S" indicates BMPs that could apply if conditions change

	2001 Stream Maintenance Projects	2. Vegetation
		15
	Sediment Removal	
1	Adobe Cr. at Highway 101	P
2	Berryessa Cr. Milpitas Blvd. to Calaveras	S
3	Berryessa Cr. Cropley to Sierra Cr. Confl.	P
4	Berryessa u/s & d/s Piedmont	P
5	Calabazas Cr. d/s Highway 101	P
6	Calera u/s UPRR	S
7	Calera u/s Escuela Parkway	P
8	Canoas Cr. Guadalupe Confl. to Bernal Ave	P
9	Coyote Cr. u/s Lower Penitencia Confl.	S
10	Flint Debris Basin, u/s Mt. Pleasant Rd.	
11	Guadalupe u/s Tasman to Montague	P
12	Los Coches d/s I - 680 to Dempsy	P
13	Matadero Creek, Hwy 101 to Louis	P
14	Randol u/s Brete Harte (from just u/s Brete Harte)	P
15	Ross u/s of Cherry (from just u/s cherry)	P
16	Rucker Creek d/s Guibal	
17	Sierra Creek d/s Mauna Kea	S
	Bank Stabilization	
1	Calabazas Creek at Quarry Rd.	
2	Canoas u/s Blue Jay (from d/s Dow)	P
3	Canoas Creek u/s Hillside Ave.	P
4	Coyote Cr. u/s Lower Penitencia Confl.	S
5	E. Little Llagas San Martin to Church	P
6	Guadalupe Slough at Baylands	
7	Los Gatos u/s Lincoln (from d/s Meridian)	P
8	Lower Penitencia d/s Redwood	P
9	Matadero Creek at Josina Ave.	P
10	Rucker Creek d/s Guibal	
11	San Tomas Creek u/s McCoy Ave.	P
12	Stevens Cr. at Clearcreek Ct. (Site A)	P
13	Stevens Cr. at Clearcreek Ct. (Site B)	P
14	Stevens Creek at Highway 85	P
15	Thompson d/s Pettigrew Ct.	P

Notes:

1. See Table 3 for BMP definitions
2. "P" indicates the BMP that most probably applies based on anticipated site conditions when the work will occur
3. "S" indicates BMPs that could apply if conditions change

	2001 Stream Maintenance Projects	3. Wildlife and Fisheries						
		16	17	18	19	20	21	22
	Sediment Removal							
1	Adobe Cr. at Highway 101		S				P	
2	Berryessa Cr. Milpitas Blvd. to Calaveras		S				S	
3	Berryessa Cr. Cropley to Sierra Cr. Confl.		S				S	
4	Berryessa u/s & d/s Piedmont		S				S	
5	Calabazas Cr. d/s Highway 101		P	S	S	S	P	
6	Calera u/s UPRR		S				P	
7	Calera u/s Escuela Parkway		S				S	
8	Canoas Cr. Guadalupe Confl. to Bernal Ave		S				P	
9	Coyote Cr. u/s Lower Penitencia Confl.	P	P			P		
10	Flint Debris Basin, u/s Mt. Pleasant Rd.	P	P					
11	Guadalupe u/s Tasman to Montague	P	P	P	P	P	P	P
12	Los Coches d/s I - 680 to Dempsy		S				P	
13	Matadero Creek, Hwy 101 to Louis	P	S				P	
14	Randol u/s Brete Harte (from just u/s Brete Harte)		S				P	
15	Ross u/s of Cherry (from just u/s cherry)		S				P	
16	Rucker Creek d/s Guibal	P	S				S	
17	Sierra Creek d/s Mauna Kea		S				S	
	Bank Stabilization							
1	Calabazas Creek at Quarry Rd.	P	S	S	S	S	P	
2	Canoas u/s Blue Jay (from d/s Dow)	P	S					
3	Canoas Creek u/s Hillside Ave.	P	S					
4	Coyote Cr. u/s Lower Penitencia Confl.	P	P	P		P		
5	E. Little Llagas San Martin to Church		S					
6	Guadalupe Slough at Baylands		P	P		P	P	
7	Los Gatos u/s Lincoln (from d/s Meridian)	P	P	S	S	S	S	
8	Lower Penitencia d/s Redwood		S				P	
9	Matadero Creek at Josina Ave.	P	S	S	S	S	P	
10	Rucker Creek d/s Guibal	P	S				S	
11	San Tomas Creek u/s McCoy Ave.		S				S	P
12	Stevens Cr. at Clearcreek Ct. (Site A)	P	P	P	P	P	P	P
13	Stevens Cr. at Clearcreek Ct. (Site B)	P	P	P	P	P	P	P
14	Stevens Creek at Highway 85	P	P	P	P	P	P	P
15	Thompson d/s Pettigrew Ct.		S				S	

Notes:

1. See Table 3 for BMP definitions
2. "P" indicates the BMP that most probably applies based on anticipated site conditions when the work will occur
3. "S" indicates BMPs that could apply if conditions change

2001 Stream Maintenance Projects

4. Land Use and Public Safety

		23	24	25	26	27	28	29
	Sediment Removal							
1	Adobe Cr. at Highway 101	P	P	S	P	P	P	P
2	Berryessa Cr. Milpitas Blvd. to Calaveras	P	P	S	P	P	P	P
3	Berryessa Cr. Cropley to Sierra Cr. Confl.	P	P	S	P	P	P	P
4	Berryessa u/s & d/s Piedmont	P	P	S	P	P	P	P
5	Calabazas Cr. d/s Highway 101	P	P	S	P	P	P	P
6	Calera u/s UPRR	P	P	S	P	P	P	P
7	Calera u/s Escuela Parkway	P	P	S	S	P	P	P
8	Canoas Cr. Guadalupe Confl. to Bernal Ave	P	P	P	P	P	P	P
9	Coyote Cr. u/s Lower Penitencia Confl.	P		S	P	P	P	P
10	Flint Debris Basin, u/s Mt. Pleasant Rd.	P	P	S	P	P	P	P
11	Guadalupe u/s Tasman to Montague	P	P	P	P	P	P	P
12	Los Coches d/s I - 680 to Dempsy	P	P	S	P	P	P	P
13	Matadero Creek, Hwy 101 to Louis	P	P	S	P	P	P	P
14	Randol u/s Brete Harte (from just u/s Brete Harte)	P	P	P	P	P	P	P
15	Ross u/s of Cherry (from just u/s cherry)	P	P	P	P	P	P	P
16	Rucker Creek d/s Guibal	P	P		S	P	P	P
17	Sierra Creek d/s Mauna Kea	P	P	S	P	P	P	P
	Bank Stabilization							
1	Calabazas Creek at Quarry Rd.	P	P		P	P	P	P
2	Canoas u/s Blue Jay (from d/s Dow)	P	P	P	P	P	P	P
3	Canoas Creek u/s Hillside Ave.	P	P	P	P	P	P	P
4	Coyote Cr. u/s Lower Penitencia Confl.	P		S	P	P	P	P
5	E. Little Llagas San Martin to Church	P			P	P	P	P
6	Guadalupe Slough at Baylands	P		S	P	P	P	P
7	Los Gatos u/s Lincoln (from d/s Meridian)	P	P	P	P	P	P	P
8	Lower Penitencia d/s Redwood	P	P	S	P	P	P	P
9	Matadero Creek at Josina Ave.	P	P	S	P	P	P	P
10	Rucker Creek d/s Guibal	P	P		S	P	P	P
11	San Tomas Creek u/s McCoy Ave.	P	P	S	P	P	P	P
12	Stevens Cr. at Clearcreek Ct. (Site A)	P	P	S	P	P	P	P
13	Stevens Cr. at Clearcreek Ct. (Site B)	P	P	S	P	P	P	P
14	Stevens Creek at Highway 85	P	P	S	P	P	P	P
15	Thompson d/s Pettigrew Ct.	P	P	S	P	P	P	P

Notes:

1. See Table 3 for BMP definitions
2. "P" indicates the BMP that most probably applies based on anticipated site conditions when the work will occur
3. "S" indicates BMPs that could apply if conditions change

2001 Stream Maintenance Projects | **5. Air Quality BMP's**

		30	31	32
	Sediment Removal			
1	Adobe Cr. at Highway 101	P		P
2	Berryessa Cr. Milpitas Blvd. to Calaveras	P		S
3	Berryessa Cr. Cropley to Sierra Cr. Confl.	P		
4	Berryessa u/s & d/s Piedmont	P		
5	Calabazas Cr. d/s Highway 101	P		P
6	Calera u/s UPRR	P		
7	Calera u/s Escuela Parkway	P		
8	Canoas Cr. Guadalupe Confl. to Bernal Ave	P		
9	Coyote Cr. u/s Lower Penitencia Confl.	P		S
10	Flint Debris Basin, u/s Mt. Pleasant Rd.	P	P	
11	Guadalupe u/s Tasman to Montague	P	P	P
12	Los Coches d/s I - 680 to Dempsy	P		
13	Matadero Creek, Hwy 101 to Louis	P	P	P
14	Randol u/s Brete Harte (from just u/s Brete Harte)	P		
15	Ross u/s of Cherry (from just u/s cherry)	P		
16	Rucker Creek d/s Guibal	P		
17	Sierra Creek d/s Mauna Kea	P		
	Bank Stabilization			
1	Calabazas Creek at Quarry Rd.	P		
2	Canoas u/s Blue Jay (from d/s Dow)	P		
3	Canoas Creek u/s Hillside Ave.	P		
4	Coyote Cr. u/s Lower Penitencia Confl.	P		S
5	E. Little Llagas San Martin to Church	P	S	
6	Guadalupe Slough at Baylands	P		P
7	Los Gatos u/s Lincoln (from d/s Meridian)	P		
8	Lower Penitencia d/s Redwood	P		P
9	Matadero Creek at Josina Ave.	P		
10	Rucker Creek d/s Guibal	P		
11	San Tomas Creek u/s McCoy Ave.	P		
12	Stevens Cr. at Clearcreek Ct. (Site A)	P		
13	Stevens Cr. at Clearcreek Ct. (Site B)	P		
14	Stevens Creek at Highway 85	P		
15	Thompson d/s Pettigrew Ct.	P		

Notes:

1. See Table 3 for BMP definitions
2. "P" indicates the BMP that most probably applies based on anticipated site conditions when the work will occur
3. "S" indicates BMPs that could apply if conditions change

	2001 Stream Maintenance Projects	6. Hazardous Materials BMP's				
		33	34	35	36	37
	Sediment Removal					
1	Adobe Cr. at Highway 101	P	P	P	P	P
2	Berryessa Cr. Milpitas Blvd. to Calaveras	P	P	P	P	P
3	Berryessa Cr. Cropley to Sierra Cr. Confl.	P	P	P	P	P
4	Berryessa u/s & d/s Piedmont	P	P	P	P	P
5	Calabazas Cr. d/s Highway 101	P	P	P	P	P
6	Calera u/s UPRR	P	P	P	P	P
7	Calera u/s Escuela Parkway	P	P	P	P	P
8	Canoas Cr. Guadalupe Confl. to Bernal Ave	P	P	P	P	P
9	Coyote Cr. u/s Lower Penitencia Confl.	P	P	P	P	P
10	Flint Debris Basin, u/s Mt. Pleasant Rd.	P	P	P	P	P
11	Guadalupe u/s Tasman to Montague	P	P	P	P	P
12	Los Coches d/s I - 680 to Dempsy	P	P	P	P	P
13	Matadero Creek, Hwy 101 to Louis	P	P	P	P	P
14	Randol u/s Brete Harte (from just u/s Brete Harte)	P	P	P	P	P
15	Ross u/s of Cherry (from just u/s cherry)	P	P	P	P	P
16	Rucker Creek d/s Guibal	P	P	P	P	P
17	Sierra Creek d/s Mauna Kea	P	P	P	P	P
	Bank Stabilization					
1	Calabazas Creek at Quarry Rd.	P	P	P	P	P
2	Canoas u/s Blue Jay (from d/s Dow)	P	P	P	P	P
3	Canoas Creek u/s Hillside Ave.	P	P	P	P	P
4	Coyote Cr. u/s Lower Penitencia Confl.	P	P	P	P	P
5	E. Little Llagas San Martin to Church	P	P	P	P	P
6	Guadalupe Slough at Baylands	P	P	P	P	P
7	Los Gatos u/s Lincoln (from d/s Meridian)	P	P	P	P	P
8	Lower Penitencia d/s Redwood	P	P	P	P	P
9	Matadero Creek at Josina Ave.	P	P	P	P	P
10	Rucker Creek d/s Guibal	P	P	P	P	P
11	San Tomas Creek u/s McCoy Ave.	P	P	P	P	P
12	Stevens Cr. at Clearcreek Ct. (Site A)	P	P	P	P	P
13	Stevens Cr. at Clearcreek Ct. (Site B)	P	P	P	P	P
14	Stevens Creek at Highway 85	P	P	P	P	P
15	Thompson d/s Pettigrew Ct.	P	P	P	P	P

Notes:

1. See Table 3 for BMP definitions
2. "P" indicates the BMP that most probably applies based on anticipated site conditions when the work will occur
3. "S" indicates BMPs that could apply if conditions change

	2001 Stream Maintenance Projects	7. Cultural Resources	
		38	39
	Sediment Removal		
1	Adobe Cr. at Highway 101	P	S
2	Berryessa Cr. Milpitas Blvd. to Calaveras	P	S
3	Berryessa Cr. Cropley to Sierra Cr. Confl.	P	S
4	Berryessa u/s & d/s Piedmont	P	S
5	Calabazas Cr. d/s Highway 101	P	S
6	Calera u/s UPRR	P	S
7	Calera u/s Escuela Parkway	P	S
8	Canoas Cr. Guadalupe Confl. to Bernal Ave	P	S
9	Coyote Cr. u/s Lower Penitencia Confl.	P	S
10	Flint Debris Basin, u/s Mt. Pleasant Rd.	P	S
11	Guadalupe u/s Tasman to Montague	P	S
12	Los Coches d/s I - 680 to Dempsy	P	S
13	Matadero Creek, Hwy 101 to Louis	P	S
14	Randol u/s Brete Harte (from just u/s Brete Harte)	P	S
15	Ross u/s of Cherry (from just u/s cherry)	P	S
16	Rucker Creek d/s Guibal	P	S
17	Sierra Creek d/s Mauna Kea	P	S
	Bank Stabilization		
1	Calabazas Creek at Quarry Rd.		P
2	Canoas u/s Blue Jay (from d/s Dow)	P	S
3	Canoas Creek u/s Hillside Ave.	P	S
4	Coyote Cr. u/s Lower Penitencia Confl.	P	S
5	E. Little Llagas San Martin to Church	P	S
6	Guadalupe Slough at Baylands	P	S
7	Los Gatos u/s Lincoln (from d/s Meridian)	P	S
8	Lower Penitencia d/s Redwood	P	S
9	Matadero Creek at Josina Ave.		P
10	Rucker Creek d/s Guibal	P	S
11	San Tomas Creek u/s McCoy Ave.	P	S
12	Stevens Cr. at Clearcreek Ct. (Site A)		P
13	Stevens Cr. at Clearcreek Ct. (Site B)		P
14	Stevens Creek at Highway 85		P
15	Thompson d/s Pettigrew Ct.		P

Notes:

1. See Table 3 for BMP definitions
2. "P" indicates the BMP that most probably applies based on anticipated site conditions when the work will occur
3. "S" indicates BMPs that could apply if conditions change

SECTION 3. ENVIRONMENTAL CHECKLIST FORM

3.1 BACKGROUND

1.	Project Title:	2001 STREAM MAINTENANCE PROJECT
2.	Lead Agency Name and Address:	Santa Clara Valley Water District Almaden Expressway San Jose, CA 95118
3.	Contact Person and Phone Number: (408) 265-2607 x2702	Jason Christie
4.	Project Location:	Various sites in Santa Clara County. See Figures 1 -2 (**Section 1**)
5.	Project Sponsor's Name and Address:	Santa Clara Valley Water District 5750 Almaden Expressway San Jose, CA 95118
6.	General Plan Designation:	Not applicable
7.	Zoning:	Not applicable
8.	Description of the Project:	See **Section 2** of the IS
9.	Surrounding Land Uses and Setting:	Various. See **Section 2**

10. Other public agencies whose approval is required: Department of Fish and Game, SF Regional Water Quality Control Board, Central Coast RWQCB, SF Army Corps of Engineers, S. F. Bay Conservation and Development Commission

3.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is Potentially Significant Unless Mitigation is Incorporated," as indicated by the checklist on the following pages.

	Aesthetics		Agricultural Resources		Air Quality
X	Biological Resources		Cultural Resources		Geology / Soils
	Hazards & Hazardous Materials		Hydrology / Water Quality		Land Use / Planning
	Mineral Resources		Noise		Population / Housing
	Public Services		Recreation		Transportation / Traffic
	Utilities / Service Systems	X	Mandatory Findings of Significance		

	3.3 ENVIRONMENTAL IMPACTS (Explanation of answers are found in Section 4.0-Environmental Evaluation)	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
1.	**AESTHETICS. Would the project:**				
a)	Have a substantial adverse effect on a scenic vista?				X
b)	Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?			X	
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area			X	
2.	**AGRICULTURE RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:**				
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?				X
3.	**AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:**				
a)	Conflict with or obstruct implementation of the applicable air quality plan?				X
b)	Violate any air quality standard or contribute to an existing or projected air quality violation?			X	
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
d)	Expose sensitive receptors to substantial pollutant concentrations?				X

3.3 ENVIRONMENTAL IMPACTS (Explanation of answers are found in Section 4.0-Environmental Evaluation)		Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
e)	Create objectionable odors affecting a substantial number of people?			X	
4.	**BIOLOGICAL RESOURCES. Would the project:**				
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			X	
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X
5.	**CULTURAL RESOURCES. Would the project:**				
a)	Cause a substantial adverse change in the significance of a historical resource as defined in section 15064.5?				X
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to section 15064.5?			X	
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X

3.3 ENVIRONMENTAL IMPACTS (Explanation of answers are found in Section 4.0-Environmental Evaluation)		Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
d)	Disturb any human remains, including those interred outside of formal cemeteries?				X
6.	**GEOLOGY AND SOILS. Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:**				
a)	Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				X
b)	Strong seismic ground shaking?				X
c)	Seismic-related ground failure, including liquefaction?				X
d)	Landslides?				X
e)	Would the project result in substantial soil erosion or the loss of topsoil?			X	
f)	Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
g)	Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				X
h)	Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.				X
7.	**HAZARDS AND HAZARDOUS MATERIALS. Would the project:**				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				X
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 3 miles of an existing or proposed school?				X
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to				X

	3.3 ENVIRONMENTAL IMPACTS (Explanation of answers are found in Section 4.0-Environmental Evaluation)	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
	Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X
8.	**HYDROLOGY AND WATER QUALITY. Would the project:**				
a)	Violate any water quality standards or waste discharge requirements?			X	
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local ground water table level (for example, the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				X
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site.			X	
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.			X	
e)	Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?			X	
f)	Otherwise substantially degrade water quality?			X	

3.3 ENVIRONMENTAL IMPACTS (Explanation of answers are found in Section 4.0-Environmental Evaluation)		Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
g)	Place housing within a 100-year flood-hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
h)	Place within a 100-year flood-hazard area structures which would impede or redirect flood flows?				X
in)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
j)	Inundation by seiche, tsunami, or mudflow?				X
9.	**LAND USE AND PLANNING. Would the project:**				
a)	Physically divide an established community?				X
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X
c)	Conflict with any applicable Habitat Conservation Plan or Natural Community Conservation Plan?				X
10.	**MINERAL RESOURCES. Would the project:**				
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b)	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?				X
11.	**NOISE. Would the project result in:**				
a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies?			X	
b)	Exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels?			X	
c)	Substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				X

	3.3 ENVIRONMENTAL IMPACTS (Explanation of answers are found in Section 4.0-Environmental Evaluation)	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X
12.	**POPULATION AND HOUSING. Would the project:**				
a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X
13.	**PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or need for new or physical altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:**				
a)	Fire protection?				X
b)	Police protection?				X
c)	Schools?				X
d)	Parks?				X
e)	Other public facilities?				X
14.	**RECREATION. Would the project:**				
a)	Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X

3.3 ENVIRONMENTAL IMPACTS (Explanation of answers are found in Section 4.0-Environmental Evaluation)	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X
15. TRANSPORTATION/TRAFFIC. Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (for example, result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?			X	
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				X
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location, that results in substantial safety risks?				X
d) Substantially increase hazards due to a design feature (for example, sharp curves or dangerous intersections) or incompatible uses (for example, farm equipment)?				X
e) Result in inadequate emergency access?				X
f) Result in inadequate parking capacity?				X
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (for example, bus turnouts, bicycle racks.				X
16. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				X
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction or which could cause significant environmental effects?				X
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				X
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has				X

3.3 ENVIRONMENTAL IMPACTS (Explanation of answers are found in Section 4.0-Environmental Evaluation)	Potentially Significant Issues	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	
g) Comply with federal, state, and local statutes and regulations related to solid waste?			X	
17. MANDATORY FINDINGS OF SIGNIFICANCE. Does the project:				
a) Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			X	
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of the past projects, the effects of other current projects, and the effects of probable future projects.)		X		
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

3.4 DISCUSSION OF ENVIRONMENTAL EVALUATION

See Section **4.0 ENVIRONMENTAL EVALUATION**

3.5 DETERMINATION:

On the basis of this initial evaluation:

I find that the proposed 2000 Stream Maintenance Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.	
I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared. [*]	X
I find that the proposed project MAY have a significant effect on the environment and an ENVIRONMENTAL IMPACT REPORT is required.	
I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.	
I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.	

Jason Christie
Program Support Unit Manager

June 14, 2001
Date

[*] In this case, the District has assumed for purposes of the IS/MND that cumulative wetland impacts are significant and has included mitigation.

SECTION 4. ENVIRONMENTAL EVALUATION

4.1 AESTHETICS. Would the project:

a. Have a substantial adverse effect on a scenic vista?

All Sediment Removal and Bank Protection Sites

Scenic vistas are not associated with any of the sediment removal or bank protection sites (See **Appendix A and B photos**); thus, there is no impact.

b. Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?

All Sediment Removal and Bank Protection Sites

None of the sediment removal or bank protection sites have scenic resources or historical buildings or are located within state scenic highways (See **Subsections 2.1.2 and 2.2.2 and Appendix A and B photos**); thus, there is no impact. There will be limited removal of small trees as discussed in **Subsection 4.4.b** below.

c. Substantially degrade the existing visual character or quality of the site and its surroundings?

All Sediment Removal Sites

Views of the 2001 SMP areas and any potential visual impacts are limited by adjacent flood control levees that, in some cases, are higher than the surrounding land surface. Also, backyard fences prevent direct observation of the creeks or channels. The 2001 SMP alters the physical appearance of the creeks between the channel banks through removal of low growing vegetation within the channel, although there will be no removal of significant tree cover (See **Subsection 4.4.b**). Sediment removal would temporarily change the appearance of a vegetated creek to a partially vegetated or bare creek until vegetation regrows. Thus, the change in view is mainly one of temporary reduced vegetation cover with a potential for an increase in surface water or channel bed. Due to the limited visibility and alteration of the project sites, this change is considered less-than-significant.

All Bank Protection Sites

As with the sediment removal sites, direct views of the bank protection sites are limited by surrounding land uses and topography, and, as noted for sediment removal activities, stream systems are dynamic and changing, altering the landscape from storm to storm, from season to season. Erosion scours remove soil and vegetation, leaving behind areas of bare earth and, sometimes, damaged structures (See **Appendix B photos**). The 2001 SMP restores channel banks to their pre-erosion footprint and is a less-than-significant impact.

Individual Bank Protection Sites

Some bank protection activities use rock or concrete materials, which can partially alter the appearance of the stream bank. The District tries to implement a biotechnical method (i.e. use of earthen materials), but if not feasible, the District uses concrete, rock or gabions. Rock and gabions are generally called "hardscape." Table 2 in **Subsection 2.2.2** identifies the amount of earthen, rock and concrete materials planned for proposed bank protection projects. As seen, approximately 93% of the proposed 2001 SMP erosion repair materials will be earthen and will not visually detract from surrounding areas.

Concrete, which may have a more artificial appearance, is proposed in two areas with a small area of coverage (approximately 200 square feet). In these areas (Matadero Creek and Stevens Creek), concrete stabilization materials already exist, and the areas are not visible from significant public vantage points. The only bank protection project visible from a public trail is Guadalupe Slough at Baylands, and the proposed maintenance activity at this location is limited in scope and size to repairing a damaged outfall and adjacent levee bank. Additionally sites will include revegetation with riparian or other erosion control plantings as summarized on Table 2. Thus, the proposed projects will not substantially degrade the visual quality of surrounding neighborhoods.

d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

All Sediment Removal Sites

Removal of sediment in some concrete-lined channels will expose previously covered areas of concrete, but would not result in a new source of substantial glare. Furthermore, the channels are located within developed urban areas, where structures and pavement exist. The relatively small linear area and the regrowth potential of vegetation within the channels would not result in significant glare and would not adversely affect day or nighttime view.

Sediment removal activities occur in the daytime and artificial lighting is not needed. However, installation of water diversion structures or cofferdams in tidal areas occur at low tides and their installation may occur at night; thus, lights would be brought in for this work. This effect is temporary--lasting only a few hours and is a less-than-significant impact.

All Bank Protection Sites

Bank protection activities occur during the daytime; thus, lights are not required and there is no impact.

4.2. AGRICULTURAL RESOURCES. Would the project:

a-c) **Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use; b) Conflict with existing zoning for agricultural use, or a Williamson Act contract; or, c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?**

All Sediment Removal Sites

The 2001 SMP sites are within existing flood control channels and sediment removal is confined to these areas (See **Subsection 2.1.2 and Appendix A**). Furthermore, access to the sediment removal sites is by way of existing transportation infrastructure; thus, no impact to agricultural resources will occur because of 2001 SMP implementation.

All Bank Protection Sites

The 2001 SMP sites are located within existing channels (improved and unimproved) and bank protection activities are confined to these areas (See **Subsection 2.2.2 and Appendix B**). For most of the locations, access is by way of existing transportation infrastructure. In a few cases, the District will need to create temporary access ramps (e.g., Guadalupe River, Los Gatos Creek, Lower Penitencia Creek, and Stevens Creek sites), however, these access points do not cross farmland.

Two sites are located within agricultural areas: E. Little Llagas and Rucker Creeks. However, access to these work sites would be via existing streets and maintenance roads, and there would be no disruption to any agricultural operations. Thus, no impact to agricultural resources will occur due to 2001 SMP implementation.

4.3 AIR QUALITY. Would the project:

a. Conflict with or obstruct implementation of the applicable air quality plan?

All Sites

The 2001 SMP project activities represent temporary maintenance activities of a short-term duration, which provide flood control and bank protection to surrounding properties and infrastructure and will not conflict or obstruct air quality plans; thus, no impact will occur. See response to **4.3.b-d and e.**

b-d Violate any air quality standard or contribute to an existing or projected air quality violation; c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an

applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors); or, d) Expose sensitive receptors to substantial pollutant concentrations?

All Sediment Removal Sites

The sediment removal sites are all located in the Bay Area Air Quality Management District (BAAQMD). Currently, the Bay Area, which includes Santa Clara County, is in attainment for all national air quality standards, except for ozone, and it is in non-attainment for two pollutants under state standards-ozone (one-hour standard) and fine particulate matter (PM_{10}--both annual mean and 24-hour standards). An approximate emission factor for construction is 51 lbs. of PM_{10} per acre per day (Bay Area Air Quality Management District, 1996). The BAAQMD level of significance is 80 lbs per day (Ibid.)

The BAAQMD level of significance is not likely to be reached or exceeded because sediment is often wet which makes it less likely to become airborne during removal and transportation activities. Given the area of disturbance for the project sites (mostly less than one acre), the BAAQMD threshold would not be reached given the planned sediment removal activities. Typically, about 10% of the sediment removal area is worked on in any one day, resulting in daily work area of less than one acre. In addition, in order to minimize the cumulative effects of District implementation of multiple maintenance activities within a short-term period, the District has incorporated BMPs for equipment, travel on access roads, transportation, and street cleaning as stipulated by the BAAQMD to avoid or minimize air quality impacts (see BMP #30 and 31 on Tables 3 and 4 in **Subsection 2.3**).

Another significant source of PM_{10} is diesel emissions. Some projects may have equipment including diesel generators on site for up to a month. Emissions for this equipment are within required standards. The emissions will be short-term and therefore, are not considered significant.

Furthermore, the 2001 SMP itself does not lead to an increase in population or displace substantial numbers of people, which could have negative air quality effects (See **Subsection 4.12 a-c**). Given the short-duration, the nature of sediment removal activities and the BMPs, the District does not expect the 2001 SMP to significantly contribute to existing or projected air quality violations, or result in a cumulatively considerable net increase for ozone or PM_{10}. This impact is less-than-significant.

All Bank Protection Sites

As with the sediment removal sites, all sites are located in BAAQMD's jurisdiction. Bank protection activities are generally of a shorter duration than sediment removal activities, involve substantially less earth work and less vehicle trips then sediment removal activities. In addition, BMPs (See **Subsection 2.3**) are included in the 2001 SMP descriptions; therefore, bank protection activities are not expected to result in violations of any air quality standard or contribute to an existing or projected air quality violation. This impact is less-than-significant.

e. **Create objectionable odors affecting a substantial number of people?**

All Sediment Removal Sites

Silt is generally not malodorous and is removed from the work area by directly loading it onto trucks. In some sites where wetland vegetation has formed, the soils are anaerobic and some short-term odor impacts may occur. However, for most sediment removal sites, the excavated sediment is hauled away within 1-3 days of removal. There are three areas where larger volumes of sediment removal require temporary stockpiling: Calabazas Creek, downstream of Highway 101, Guadalupe River upstream of Tasman, and Flint Debris Basin. The project includes a BMP to avoid stockpiling potentially malodorous sediments within 1,000 feet of a residential neighborhood (see BMP#32 on Tables 3 and 4 in **Subsection 2.3**). In addition, the District will monitor stockpiles for odor. If an offensive odor develops or if complaints are received, the District will remove the material and dispose of it at a landfill. Thus, project impacts are considered less-than-significant.

All Bank Protection Sites

Bank protection activities do not result in the removal of sediment under anaerobic conditions; thus, these activities are not expected to create objectionable odors.

4.4 BIOLOGICAL RESOURCES

Would the project:

a. **Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

This section reviews the listed and special status species that are or may be present at any of the 2001 SMP maintenance sites. The species that may be affected by 2001 SMP activities according to surveys conducted by District biologists and include: steelhead trout, California red-legged frog, salt marsh harvest mouse, burrowing owls, and western pond turtles. No California tiger salamanders or foothill yellow-legged frogs were observed. Table 5 summarizes sites that may have significant biological resources. Specific species are further reviewed below.

TABLE 5: SUMMARY OF EXISTING BIOLOGICAL RESOURCES

	Creek-Location	Dewater-Coffer Dam	Fish Species (1)	Endangered& Threatened Species	MBTA (3)	Riparian	SRA
	Sediment Removal						
1	Adobe Creek at Highway 101	Yes			Yes		
2	Berryessa, Milpitas-Calaveras	No	Native		Yes		
3	Berryessa, Cropley-Sierra	Maybe	Native		Yes		
4	Berryessa u/s & d/s Piedmont	Maybe	Native		Yes	Trees	
5	Calabazas Creek d/s Highway 101	Yes	Native	Owl	Yes	Yes	
6	Calera, UPRR to Milpitals	Yes			Yes		
7	Calera u/s Escuela	Yes			Yes		
8	Canoas Creek, Guadalupe Confluence to Cattle Road	Yes		Owl	Yes		
10	Flint Debris Basin u/s Mt Pleasant Rd.	No		Frog	Yes		
11	Guadalupe u/s Tasman to Montague	Yes	C, S & N		Yes	Yes	Yes
12	Los Coches d/s I680 to Dempsey	Yes			Yes		
13	Matadero Creek Highway 101 to Greer	Yes	Native	Mouse, Turtle	Yes		
14	Rando Creek u/s Bret Harte Aven	Maybe	Native		Yes		
15	Ross Creek u/s Cherry Ave	Maybe			Yes		
17	Sierra Creek, d/s Mauna Kea	Maybe	Native		Yes	Trees	
	Erosion Repair						
1	Calabazas Creek at Quarry Road	Yes		Frog	Raptor	Yes	Some
2	Canoas Creek d/s Blue Jay Drive	Maybe		Owl			
3	Canoas Creek u/s of Hillsdale Ave	Maybe		Owl			
4	Coyote u/s Lower Penitencia Confl.	Maybe	S&N		Raptor	Yes	
5	E. Little Llagas San Martin to Church	No					
6	Guadalupe Slough at Baylands	No	C, S & N	Owl			
7	Los Gatos Creek u/s of Lincoln Ave	Yes	C, S & N	Frog, Turtle	Raptor	Yes	Yes
8	Lower Penitencia d/s Redwood	Yes	Native				
9	Matadero Creek at Josina Avenue	Yes	Native	Frog, Turtle		Trees	Yes
10	Rucker Creek d/s Guibal	Maybe		Frog			
11	San Tomas Ck u/s McCoy Ave	Maybe	Native	Frog		Yes	
12	Stevens Creek at Clearcreek Ct. (Site A)	Yes	S&N	Frog, Turtle	Raptor	Yes	Yes
12	Stevens Creek at Clearcreek Ct. (Site B)	Yes	S&N	Frog, Turtle	Raptor	Yes	Yes
13	Stevens Creek at Highway 85	Yes	S&N				
14	Thompson d/s Pettigrew Ct.	No					
	Total						

(1) Fish Species
Native=Native Fish
S=Steelhead
C=Chinook Salmon
Native=Native Fish

(2) Special Status Species
(3) Migratory Bird Treaty Act

Frog=Calif. Red-Legged Frog
Owl=Burrowing Owl
Mouse= Salt marsh harvest mouse
Turtle= Western pond turtle

Steelhead Trout and Chinook Salmon

Sediment removal and bank protection activities will occur in segments of streams with known habitat for the federally threatened steelhead trout (*Oncorhyncus mykiss*):

- Coyote Creek (bank protection)
- Guadalupe River (sediment removal)
- Guadalupe Slough (bank protection)
- Los Gatos Creek (bank protection)
- Stevens Creek (bank protection)

District – managed streams lie geographically within two distinct steelhead population units (the Central California Coast Evolutionary Significant Unit and the South/Central California Evolutionary Significant Unit). District streams provide access for spawning adult steelhead, with rearing habitat and out migration corridors for juvenile steelhead.

The National Marine Fisheries Service issued a final notice in February 2001, designating "critical habitat" for steelhead to include all river reaches accessible by the species. All project stream segments that support steelhead are considered to be within critical habitat areas. Project sites on all of the above streams occur within migration corridors for migrating juveniles steelhead. Some project reaches on Los Gatos Creek and Stevens Creek occur within rearing habitat for juvenile steelhead.

Chinook salmon is a California species of special concern, and presently uses the lower portions of Coyote Creek, the Guadalupe River, and occasionally Los Gatos Creek for spawning.

Individual Sediment Removal Sites

None of the planned sediment removal activities will occur in segments of streams with known steelhead habitat, except Guadalupe River. Project reaches on Guadalupe River occur within migration corridors for migrating juvenile steelhead. Passage will be maintained around these sites and there will be no direct removal or significant adverse effects to critical habitat, removal of riparian trees, potential shaded riverine aquatic habitat (SRA) or riparian vegetation.

The 2001 SMP includes BMPs to protect fish and habitat in those streams where steelhead and Chinook salmon are present. As outlined in Tables 3 and 4 in **Subsection 2.3**, project activities are typically conducted when channels are dry or when low flow conditions are present and outside of the steelhead migration period, December through March for adult upstream migration and April through May ~~June~~ for juvenile downstream migration. (BMP#20). Upstream migration for Chinook salmon spawning typically occurs between October and December. Downstream migration generally occurs between March and the end of May.

Prior to initiation of project activities, sites will be surveyed and native fish or other aquatic vertebrates with in the project site may be transferred to another reach (BMP#18). Other BMPs involve maintaining passage flows around project sites where water is diverted (BMP#19) and removal of temporary fills except where clean river cobble/gravel is used. (BMP#21 and #22). **See also Subsection 4.4.d.** In conclusion , there are no significant impacts to the species or to critical habitat with the implementation of the BMPs and mitigation monitoring plan.

Individual Bank Protection Sites

Project sites for bank protection activities on Coyote Creek, Los Gatos Creek and Stevens Creek will occur with migration corridors for juvenile steelhead. Project reaches on Los Gatos Creek and Stevens Creek occur within rearing habitat for juvenile steelhead. Passage will be maintained around project sites and habitat will be restored to exiting conditions in project reaches within rearing habitat. Site inspections will be conducted by qualified fisheries biologists before during and after construction activities. A small amount of riparian habitat 91 square feet may be removed at the Los Gatos Creek. This removal could affect fishery habitat (SRA), which represents a modification of "critical habitat" in existing steelhead rearing habitat. The vegetation removed will not have a significant effect on fish or critical habitat. The access is temporary and will be re-vegetated per BMP #15.

As indicated above, for sediment removal projects, the 2001 SMP includes BMPs to protect fish habitat in those streams where steelhead are present, which will also apply to bank protection activities. As outlined in Tables 3 and 4 in **Subsection 2.3**, project activities are typically conducted when channels are dry or when low flow conditions are present and outside of the steelhead migration period, December through March for adult upstream migration and April through May ~~June~~ for juvenile downstream migration. (BMP#20). As indicated above, upstream migration for Chinook salmon spawning typically occurs between October and December. Downstream migration generally occurs between March and the end of May. Prior to initiation of activities, project sites will be surveyed and native fish or other aquatic vertebrates within the project site may be transferred to another reach (BMP#18). Other BMPs involve maintaining passage flows around project sites where water is diverted (BMP#19) and removal of temporary fills except where clean river cobble/gravel is used. (BMP#21 and #22). **See also Subsection 4.4.d.** In conclusion, there are no significant impacts to the species or to critical habitat with the implementation of the BMPs and mitigation monitoring plan.

California Red Legged Frog

The California red-legged frog (*Rana aurora draytonii*) is federally listed as Threatened and is a California Species of Special Concern. Red-legged frogs inhabit dense, shrubby, riparian vegetation associated with deep, slow moving water. Although individuals can occur in seasonal streams and ponds, reproducing populations probably cannot be maintained if surface water disappears entirely at anytime during the breeding season (March-July). To date, many of the streams of the streams in the SCVWD study area with suitable habitat and access have been surveyed for California red-legged frog, using USFWS protocol. Red-legged frog populations in the study area are primarily found in the streams in the foothills and mountain ranges of Santa Clara County. This species is considered extirpated from most of the streams in urban portions of the area (Santa Clara Valley Water District, March 2001a).

The USFWS recently proposed critical habitat designations for California red-legged frog, including 221,900 acres of land in eastern and southern Santa Clara County. No critical habitat has been proposed in the SCVWD jurisdiction (Ibid.).

Individual Sediment Removal and Bank Protection Sites

According to reviews conducted by District biologists, the following sites may support California red-legged frogs:

- Calabazas Creek (Bank Protection)
- Flint Debris Basin (Sediment Removal)
- Guadalupe River (Sediment Removal
- Los Gatos Creek (Bank Protection)
- Matadero Creek (Bank Protection)
- Rucker Creek (Sediment Removal and Bank Protection)
- Stevens Creek (Bank Protection)

Sediment removal activities within California red-legged habitat areas would not result in direct removal of habitat, but could result in harm to individuals. Bank protection can impact frogs and other amphibians through incremental loss of habitat over time by precluding the re-establishment of riparian vegetation by using hardscape materials. As shown on Table 2 in **Subsection 2.2.2**, the majority of materials planned to be used for erosion repairs at the above sites are earthen (approximately 70%), thus resulting in minor amounts of hardscape distributed over 9 sites.

Due to the existence of potential suitable frog habitat and the potential for harm to individual frogs during the construction period, a full-protocol frog survey has been recommended by District biologists at the following locations: Calabazas Creek at Quarry Road, Flint Debris Basin, upstream of Mount Pleasant Road, Los Gatos Creek upstream of Lincoln Avenue, Matadero Creek at Josina Avenue, Rucker Creek downstream of Guibal Avenue, and the Stevens Creek sites. According to review by District biologists, red-legged frogs were not found in recent upstream surveys at Los Gatos Creek and Stevens Creek, and it is unlikely that they will be found at these project sites, however, a survey is recommended.

Biological surveys for endangered species (California red legged frog and the salt marsh harvest mouse) ~~have not been~~ were completed by District biologists in May 2001. The U.S. Fish and Wildlife Service protocol requires the surveys to be completed during the breeding season in May, which will be during the public review phase of this IS/MND. ~~District staff will be conducting protocol surveys at the above locations~~

~~during May 2001. If frogs are found at any of the surveyed sites, the site will be dropped from the proposed 2001 Stream Maintenance Project list, thus avoiding any impacts.~~ The above 2001 SMP sites were surveyed for California red-legged frogs by District biologists in May 2001, and none of the channels showed evidence of this species. (See **Appendix E**). Although surveys conducted by District biologists in May 2001 found no evidence of California red-legged frogs on any sites with potential habitat, pre-construction surveys are recommended to be conducted for the project activities at Calabazas Creek (sediment removal) and Matadero Creek at Josina Avenue (bank protection) due to presence of the species in upstream locations. If found, the District shall implement a relocation plan and other protection measures, in consultation with U.S. Fish and Wildlife Service (see Mitigation Measure #1 below).

Salt Marsh Harvest Mouse

The salt marsh harvest mouse, a state and federally listed endangered species, inhabits salt marshes fringing San Francisco Bay and Suisun Bay with two subspecies. The northern subspecies (*R. r. halicoetes*) inhabits the marshes fringing San Francisco, San Pablo, and Suisun Bays north from Gallinas Creek. The southern subspecies (*R. r. raviventris*) inhabits both sides of the San Francisco Bay in the central and south region. Salt-marsh harvest mice are most abundant in dense pickleweed salt marshes. During high tides, the mice will use tall vegetation to escape inundation. During the spring and summer months, some individuals will move from Pickleweed marsh to bordering grasslands.

The Matadero Creek sediment removal site was the only 2001 SMP site thought to support potential harvest mouse habitat due to presence of pickleweed marsh downstream of Highway 101 on the northern side of the levee. ~~District staff will be conducting protocol survey at the above location during May 2001. If mice are found at any of the surveyed project areas, the project will be dropped from the proposed 2001 Stream Maintenance Project list, thus avoiding any impacts.~~ Potential habitat (i.e. pickleweed) was previously identified at the Matadero Creek upstream of Highway 101 site. However, subsequent review by District biologists and results of the wetland assessment found no suitable vegetation cover (i.e. pickleweed) for this species at this site, and further surveys were not deemed necessary.

Mitigation Measure

1. ~~Complete field surveys~~ Conduct pre-construction surveys for California red-legged frogs ~~and salt marsh harvest mice at sites with potential habitat (see Table 5), using U.S. Fish and Wildlife Service survey protocols~~ at the Calabazas Creek (sediment removal) and Matadero Creek at Josina Avenue (bank protection) due to presence of the species in upstream locations. If found, the District shall implement a relocation plan and other protection measures, in consultation with U.S. Fish and Wildlife Service. ~~If any project site is found to have a potential impact to either species, that project will be eliminated from the 2001 SMP Project List and final IS/MND before adopted of the MND, in order to avoid impacts to endangered species.~~

Burrowing Owls

The burrowing owl (*Athene cunicularia*) is a federal and California Species of Special Concern. Burrowing owls are found in areas characterized by low-growing vegetation, including annual and perennial grasslands, deserts, and open scrub habitat. Burrowing owls typically use burrows made by fossorial mammals, such as ground squirrels or badgers, but may also use artificial structures such as cement, asphalt, or wood debris piles, cement culverts, or openings beneath cement or asphalt pavement. The burrowing owl breeding season extends from March through August.

Burrowing owls were once common in the dry foothills and valleys of California, but much of the suitable habitat has been eliminated by urban and agricultural development. In Santa Clara County, burrowing owls have been observed near urban areas using open fields, landfills, creek levees and banks, marshes, and golf courses, as well as grasslands in the foothill and mountain ranges (Santa Clara Valley Water District, March 2001a).

Individual Sediment Removal and Bank Protection Sites

According to reviews conducted by District biologists, the following sites may support burrowing owl nesting: Calabazas Creek, Canoas Creek, and Guadalupe Slough at Baylands. Generally, proposed activities would occur outside of the nesting season (March through August), and projects will not result in direct habitat removal. Additionally, the project includes a BMP to require pre-construction surveys for nesting species if construction schedules are changed (see BMP#18 on Tables 3 and 4 in **Subsection 2.3**). Thus, any potential impact to nesting burrowing owls would be avoided or less-than-significant.

Western Pond Turtles

The Western pond turtle (*Clemmys marmorata*) is a federal and California Species of Special Concern. Western pond turtles are found in slow-moving aquatic habitats, such as ponds, marshes, streams, and irrigation ditches. They use submerged or emergent vegetation for foraging and basking while partially submerged and require logs or other objects for basking out of the water. Western pond turtles nest in upland habitats adjacent to aquatic sites that provide suitable thermal and hydric environment for the incubation of eggs. Most egg-laying occurs during May and June, although some individuals may deposit eggs as early as late April and as late as early August.

Historically, Western pond turtles inhabited most Pacific slope drainages in California. Exploitation of pond turtles for food, habitat loss from agriculture, urbanization, flood control, predation, and competition from introduced fish and bullfrogs have contributed to population declines. In Santa Clara County, low numbers of western pond turtles are found in aquatic environments throughout the District (Santa Clara Valley Water District, March 2001a.) Pre-construction surveys will identify individual's nests per BMPs #16 and #18.

Individual Sediment Removal and Bank Protection Sites

According to reviews conducted by District biologists, the following sites may support Western pond turtle habitat: Los Coches Creek, Los Gatos Creek, Matadero Creek, and Stevens Creek. Sediment removal activities within pond turtle habitat areas would not result in direct removal of habitat, but could result in harm to individuals during construction. Bank protection activities can impact turtles and other amphibians through incremental loss of habitat over time by precluding the re-establishment of riparian vegetation by using hardscape materials. However, as shown on Table 2 in **Subsection 2.2.2**, the majority of materials planned to be used for erosion repairs at the above sites are earthen (approximately 70%), thus resulting in minor amounts of hardscape distributed over 5 sites. Additionally, the project includes a BMP to require pre-construction surveys for Western pond turtles, with relocation if found at the sites (see BMP#17 on Tables 3 and 4 in **Subsection 2.3**). Thus, any potential impact to Western pond turtles present at the site during maintenance activities would be avoided or less-than-significant.

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

All Sediment Removal Sites

There are no sensitive natural communities that would be impacted by the project. As summarized on Table 5, two of the 2001 SMP sediment removal sites contain or are adjacent to riparian vegetation and habitat areas: Calabazas Creek and Guadalupe River. The sediment removal activities have been designed to avoid removal of riparian vegetation.] No riparian or heritage-sized trees will be removed from any of the sediment removal sites, except for potential removal of small amounts of willow vegetation at Calabazas Creek and Guadalupe River.

At Calabazas Creek, a dense vegetated willow riparian area exists on the westerly bank. This area was designed as part of the 1997 flood control project that created the channel, and will remain undisturbed. The sediment removal operations will remove approximately 17 small clumps of young willows, all of which are less than 6-inches in diameter, per the CDFG MOU. In addition, the operations will remove one cottonwood tree that is less than 4-inches in diameter, also per the CDFG MOU. In conclusion, with the implementation of BMPs and mitigation monitoring plan, there are no significant or adverse impacts to species or critical habitat.

At Guadalupe River, sediment removal will be completed in two phases on either side of the banks in order to maintain the existing riparian corridor. Implementation of a flood control project in the 1980s resulted in raising the levees and installing two secondary channels and depressed maintenance roads immediately adjacent to the inboard sides of the levees. These improvements avoided the natural channel and its riparian corridor, which meanders through the center portion of the facility, although small willow clumps outside the riparian corridor may be removed or trimmed.

All Bank Protection Sites

None of the 2001 SMP bank protection sites affect sensitive natural communities (e.g., oak forest or coastal habitat) identified in local or regional plans or by the CDFG or USFWS, except for limited riparian tree removal as discussed below. No riparian or heritage-sized trees will be removed from any of the erosion repair sites, except at Matadero Creek, San Tomas Creek, and Stevens Creek as described below. The proposed work plans at Stevens Creek at Clearcreek Court protect two existing sycamore trees.

Individual Bank Protection Sites

The bank protection sites mostly consist of no vegetation or wetland vegetation that is accounted for in Table 6 below(approximately 0.05 acres). There is little or no existing vegetation at the sites where "hardscape" will be added. The only vegetation that will be removed will be small amounts of wetland vegetation at Calabazas Creek, Canoas Creek, E. Little Llagas Creek, Guadalupe Slough, Los Gatos Creek, Rucker Creek, and Stevens Creek at Highway 85 (see Table 6). No work is proposed in the natural channel or riparian corridor. Therefore, with the implementation of BMPs and mitigation monitoring plan, there is no significant or adverse impact to species or critical habitat.

Of the 14 planned bank protection projects, very little new additional "hardscape" will be added. As summarized on Table 2 in **Subsection 2.2.2**, the project will result in a net increase of approximately 0.81 acre of "hardscape," compared to 10.26 acres that will be reconstructed consisting of earthen materials. The increased amount of hardscape material is not a significant portion of the total proposed (approximately 7%), and is consistent with draft goals of the District's *Draft Stream Maintenance Program*, which recommends installation of no more than 50% hardscape designs in future bank protection projects. The amount of hardscape proposed in the 2001 SMP is minuscule in relation to existing "hardscape" and remaining vegetation in these areas.

There is one site where small amounts of willow riparian vegetation and/or trees may be removed. At Los Gatos Creek, approximately 91 square feet of riparian vegetation, including 3 trees, may be removed with creation of the new access and the proposed slope work.

At the Stevens Creek Sites A and B, access to the work area will be via a lower floodplain area and the channel. Although the access route will be routed to minimize damage, some trees and shrubs will be removed. At the Stevens Creek Sites A and B, in order to gain access to the channel, some small shrubs and grasses will be disturbed along 600 linear feet of the stream, mostly within the floodplain area. Additionally a few trees within the floodplain, will require trimming: one 6-inch sycamore limb, one 6-inch buckeye limb, two 8-inch buckeye limb, one 18-inch oak limbs (from slightly fallen tree) and one 6-inch willow limb. A small clump of non-native trees less than 6-inches in diameter will be removed, per the CDFG MOU.

Some small trees and shrubbery will require trimming or removal at the Stevens Creek at Highway 85 site and also may be required at Matadero Creek. At Stevens Creek at Highway 85, a large eucalyptus tree located at the top of bank is severely undermined and may require removal. To gain access to the project site, approximately 1,300 square feet of grasses, small shrubs and berry vines will be disturbed. Per the CDFG MOU, one 6-inch sycamore limb and one 6-inch cottonwood limb will be removed.

At the Matadero Creek at Josina project, one 10-inch buckeye limb will be trimmed in order to gain access to the site. At the Thompson Creek site, the earthen slopes will be replanted with trees and shrubs. The final project grading will remove the access road and contour all affected slopes and creek bed areas to conform to natural features, and restore in-channel plan form features respectively. The creek bed finish grading shall include low flow channel features including riffles, pools, runs and gravel bars. Erosion resistant vegetation and riparian cuttings will be installed to stabilize the graded slope and bank areas.

In conclusion, there will be minor vegetation removal and trimming, but with the implementation of BMPs, there are no significant or adverse impacts to species or critical habitat.

c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Impacts to wetlands are reviewed in this section on an individual project level, and then on a cumulative level in **Subsection 4.17.b**. The terms "wetlands" and "wetland vegetation" as used in this report refer to jurisdictional wetlands as regulated by the U.S. Army Corps of Engineers (Corps) under the Clean Water Act and related laws. Jurisdictional wetlands are identified by the presence of hydrophytic vegetation, hydric soils, and wetland hydrology as defined in the Corps of Engineers Wetlands Delineation Manual, January 1987.

Wetland vegetation usually indicates an area which is subject to the Corps' jurisdiction under the Clean Water Act, but not always. Likewise, the Corps can have jurisdiction over other types of aquatic areas (such as open water), and sometimes wetland vegetation is not evident at disturbed areas which nevertheless are defined as jurisdictional wetlands.

Tidal and non-tidal wetland impacts resulting from sediment removal and bank protection projects total ~~4.26~~ 4.32 acres ~~(186,500 square feet)~~, of which approximately ~~1.86~~ 2.13 acres are tidal sites and ~~2.45~~ 2.19 acres are non-tidal sites. Of the 30 project sites, two sites affect over 1.5 acre of wetland: Calabazas Creek and Guadalupe River. The other sites range in wetland acreage from 0.00 to 0.27 ~~0.26~~. Table 6 summarizes wetland removal. Appendix C provides a summary of vegetation and conditions at each site.

Individual Sediment Removal Sites

Flood control projects inadvertently create conditions suited to wetland establishment by providing open (i.e., shadeless), relatively flat-bottomed channels. Maintenance (i.e., sediment removal) maintains the open, relatively flat-bottomed channel configuration that is conducive to wetland plant growth. The 2001 SMP affects wetlands through the direct removal of wetland vegetation as part of the sediment removal activity, resulting in a temporary loss of wetlands. However, a permanent filling or hydrologic alteration does not result from this activity. The 2001 SMP sites were developed for flood control purposes, and sediment removal is a routine, cyclic activity that occurs to maintain flood control capacity. All of the channels affected by sediment removal have been previously modified for flood control purposes. (See **Subsection 2.1.2 and Appendix A, Figures and Photos**). Sediment removal does not result in a permanent loss of wetlands, and the loss of vegetation is temporary. After the sediment removal is completed, there is regrowth of wetland vegetation as discussed below.

District studies have found that wetland vegetation often quickly re-establishes following sediment removal projects. The District's "Instream Wetland Vegetation Regrowth Study" (Rankin and Hillman, 2000) found 65% and 98% average regrowth within one and two years, respectively, after 1997 sediment removal at six non-tidal freshwater sites. Average regrowth on two tidal study sites was less, at 21% and 29% after one and two years, respectively. The pattern of rapid re-establishment, with greater rates in non-tidal than in tidal areas, was supported by regrowth study results on four additional 1998 sediment removal sites. After one year those sites supported more non-tidal wetland than was present prior to sediment removal and almost 70% of the tidal wetland that was present prior to sediment removal (Santa Clara Valley Water District, March 2001a).

The regrowth study acknowledges that there were changes (species and structure) to wetland vegetation within the channels studied; however, these changes do not necessarily constitute a substantial adverse effect. Generally, because of their location in active channels, in-stream nontidal wetland vegetation is subject to frequent natural disturbances and variable hydrologic conditions on a seasonal and annual basis due to scouring flood flows, movement of sediment in the channel bed, variable timing, magnitude and duration of flows, and a wide variation in the amount and timing of annual rainfall. As seasonal and annual conditions vary, wetland vegetation expands and contracts, disappears from some areas and colonizes others, and varies in terms of vegetation density and species composition (SCVWD, 1999).

TABLE 6
SUMMARY OF WETLAND IMPACTS

Creek Channel	Channel Type	Temporary Non-tidal Wetland Removal (Acres)	Temporary Tidal Wetland Removal (Acres)
SEDIMENT REMOVAL PROJECTS			
Adobe Creek at Hwy 101	Concrete		0.01
Berryessa, Milpitas-Calaveras	Earth		0.27 repeat
Berryessa, Cropley-Sierra	Earth/Concrete	0.00 repeat	
Berryessa, u/s & d/s Piedmont	Concrete	0.03	
Calabazas Creek d/s Hwy 101	Earth	~~1.70~~ 1.44	0.27
Calera UPRR to Milpitas	Concrete	0.17	
Calera u/s Escuela	Earth	0.05	
Canoas Creek	Earth/Concrete	0.15	
Flint Debris Basin	Earth	0.00	
Guadalupe u/s Tasman-Montague	Earth		1.58
Los Coches, I-680-Dempsey	Earth/Concrete	0.01	
Matadero Creek, Hwy 101-Louis	Earth/Concrete	0.13	
Randol, u/s Bret Harte Ave.	Concrete	0.00	
Ross Creek u/s Cherry Ave.	Concrete	0.00	
Sierra Creek, d/s Mauna Kea	Earth	0.16 repeat	
	Sediment Removal Subtotal	*~~2.40~~ 2.14*	*~~1.86~~ 2.13*
BANK PROTECTION			
Calabazas Creek at Quarry Road	Natural	0.00	
Canoas Creek d/s of Dow Drive	Earth/Concrete	0	
Canoas Creek u/s Hillsdale Ave.	Earth/Concrete	0.00	
Coyote u/s Lower Penitencia	Earth		0.00
E. Little Llagas, San Martin-Church	Earth	0.03	
Guadalupe Slough at Baylands	Levee		0.00
Los Gatos Creek d/s Meridian	Natural	0.00	
Lower Penitencia, d/s Redwood	Earth	0.00	
Matadero Creek at Josina Ave.	Natural	0.00	
Rucker Creek d/s Guibal	Earth	0.02	
San Tomas Creek u/s McCoy Ave.	Earth	0.00	
Stevens Creek at Clearcreek Ct. (A)	Natural	0.00	
Stevens Creek at Clearcreek Ct (B)	Natural	0.00	
Stevens Creek at Hwy 85	Natural	0.00	
Thompson d/s Pettigrew	Earth	0.00	
	Bank Protection Subtotal	*0.05*	*0.00*
	TOTAL 2001 SMP	**~~2.45~~ 2.19**	**~~1.86~~ 2.13**

In addition, the wetland plant species found in the study channels were very common and widespread and a transition from one pervasive species to another is not a significant change. The species found in the 2001 SMP are ubiquitous as were those found in the regrowth study channels (see discuss above under Environmental Setting at the beginning of **Subsection 4.4**). The wetland vegetation affected with sediment removal activities are not associated with rare or endangered species as described in **Subsection 4.4.a**.

As described above, in-stream wetland plant communities occur in an inherently dynamic ecosystem. Regrowth in the 2001 SMP sites can occur from remnant propagules (e.g., fragments of rhizomes and seeds in the soil remaining after excavation) and from propagules that disperse into the 2001 SMP area after excavation has occurred. The wide-spread occurrence of wetland plants in the immediate vicinity of the sediment removal sites provide ample propagule sources for revegetation. Although the specific composition of the plant communities within each site may vary somewhat from that which was affected, the species likely to comprise the regrowing wetland vegetation are typical of those which occur within the watersheds.

Sediment and wetland vegetation removal temporarily converts the habitat type in the project channels from freshwater wetland to open water. The temporary increase in open water results in an expansion of habitat for a variety of common bird species, while temporarily reducing the amount of habitat available for other common bird species. There is no substantial change in habitat value.

Based on the above discussion, the District concludes that there are less-than-significant individual project impacts to wetland vegetation, although the District recognizes that repeated sediment removal activities results in potential significant cumulative impacts as discussed on **Subsection 4.17** below. The total amount of wetland removal is spread out over numerous sites and is relatively small at any given site. [Remaining wetland habitat exists that will not be disturbed and there is evidence of wetland vegetation regrowth. No permanent loss of wetlands or wetland habitat is expected to occur (i.e., no permanent removal, filling, or hydrological interruption). The temporal interruptions and alterations of some biological functions due to sediment removal include the temporary alteration in habitat for wetland plants and related wildlife. These interruptions do not occur at the same time, scale, or frequency as natural occurring events. Habitat conditions will not be significantly altered, nor are the conditions that lead to the establishment of wetland vegetation significantly altered. The channels will be capable of supporting wetland vegetation after sediment removal as prior to implementation of the project.

The Calabazas d/s of Hwy. 101 and the Guadalupe from Tasman to Montague projects individually have more than 1.50 acres of wetland impacts. For the purposes of this project, the District is assuming that the temporal wetland impacts from these two individual projects are significant. These impacts shall be mitigated as part of the cumulative wetland mitigation (see Mitigation Measure 2 under Subsection 4.17) to a level below significance and there is not a loss of or adverse impact to critical habitat.

All Bank Protection Sites

Approximately 0.05 acres of wetland will be removed as a result of the erosion repair activities as summarized on Table 6. This is considered a less-than-significant impact because of the small size, isolated nature, and lack of significant value. Proposed bank repair methods do not preclude wetlands establishment. The affected wetland plant species are common ones, and the wetland vegetation is not associated with rare or endangered species; therefore, individual wetland impacts associated with the bank protection activities are less-than-significant.

d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

All Sediment Removal Sites

The District restricts 2001 SMP activities to a specific channel reach, performing sediment removal during normal working hours, with the exception of installing tidal cofferdams, which must occur during a low tide event (which can occur during day or evening hours). Except for removing the sediment, the physical dimensions of the channels are not changed and the channel can be traversed by wildlife. Adjacent terrestrial and wetland vegetation provides suitable cover for continued species movement along the channel either during construction or after completion of individual projects. It is common to observe wildlife such as egrets, mallards, black phoebes, killdeer using the channels while sediment is being physically removed.

Sediment removal activities typically take place in the late summer through fall, which avoids the nesting and breeding season for most species. In addition, BMPs are included that provide for pre-construction surveys in areas where nesting birds may occur (see BMP #17 Tables 3 and 4 in **Subsection 2.3**). In some areas, the sediment removal activities may temporarily deter some common wildlife species from using the area for a period during which the maintenance activities are taking place. No special status species will be affected (See **Subsection 4.4.a**).

While streamflow is proposed to be diverted around project sites to maintain downstream flows, sediment removal is performed outside of the migration period for anadromous fish (e.g., steelhead) upstream migration--December through March, and for juveniles down-migrating--April through May ~~June~~. Water diversions are of concern only in those channels where steelhead (a listed species) and chinook salmon (a species of concern) are present. The 2001 SMP includes measures reducing potential impacts to fish migration corridors by conducting work outside of the migration periods and maintaining bypass flows as part of any water diversion (See **Subsection 2.3 and 4.4.a**).

Sediment removal will result in a temporary increase in open water habitat, and in some cases, a change in the type of wetland vegetation. This is not necessarily a significant adverse effect because the resulting open water provides habitat that can be used by the common wildlife species typically associated with flood control channels. Wetland habitat is not permanently affected by sediment removal. Native wildlife nursery sites are not known to be present in the channels slated for sediment removal. The 2001 SMP is expected to have less-than-significant impact on wildlife migration, corridors, or nursery sites.

All Bank Protection Sites

The sediment removal discussion also pertains to bank protection activities although bank protection activities generally affect even smaller areas and are of shorter durations than sediment removal activities. BMPs are included in the 2001 SMP project description to avoid or minimize impacts to a less-than-significant level for these environmental factors (See **Subsection 2.3**). No significant tree cover is proposed for removal that would affect species from moving through the area. Nor will the removal of the trees result in a large opening of the canopy which would raise stream water temperatures (See **Subsection 4.4.b**).

e-f Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

All Sediment Removal and Bank Protection Sites

The 2001 SMP represents short-term, temporary maintenance activities and will not result in permanent loss of wetland or riparian habitat (See **Subsection 4.4(a-d)**). There are no known local, regional or state habitat conservation plans within the 2001 SMP project area. The impact is less-than-significant.

4.5 CULTURAL RESOURCES. Would the project:

a-d a) Cause a substantial adverse change in the significance of a historical resource as defined in Section **15064.5; b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to** Section **15064.5; c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or, d) Disturb any human remains, including those interred outside of formal cemeteries?**

All Sites

All of the sediment removal sites and many of the erosion repair sites have been previously disturbed. For activities in improved channels or where a previous maintenance activity had occurred, sediment removal and erosion repairs are not likely to affect archaeological, paleontological, or historic resources because the banks and channels have been disturbed by the original channel construction activity. Removal of accumulated sediments do not result in subsurface excavation or further ground disturbances (See **Subsection 2.1.2 and Appendix A**); thus, the likelihood of affecting an archaeological or paleontological resource is low (other than accidental discovery). However, a potential exists to uncover archaeological resources (e.g., Native American remains) that were deposited along with the sediment especially in bank protection project areas along natural channels. The District has a BMP for the unexpected discovery of remains (See BMP #38 and 39 on Table 3 in **Subsection 2.3**). Historical sites are not present in the project areas. Thus, the discovery of unknown cultural resources during construction will be managed with implementation of proposed BMPs. In conclusion, based on preliminary screening and use of BMPs (for sites identified as culturally significant) there will be no adverse or significant impacts to cultural resources.

4.6 GEOLOGY AND SOILS. Would the project:

a-d Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving ...: a) rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; b) ... strong seismic ground shaking; c) ... seismic-related ground failure, including liquefaction; or, d) ... landslides?

All Sediment Removal Sites

Santa Clara County is located in a seismically active region. The County is transected by the San Andreas and Calaveras Fault zones. Sediment removal within existing flood control channels does not involve the construction of structures for human occupancy; therefore, people are not exposed to geologic hazards. The 2001 SMP has no impact.

All Bank Stabilization Sites

The purpose of bank protection is often to prevent the loss of structures (e.g., bridges, houses) by reestablishing the footprint of the eroded bank. This activity may result in a lessening of exposure to the effects of geologic hazards. As with sediment removal, construction of structures for human occupancy is not proposed; therefore, there is no geologic hazard impact.

e. Result in substantial soil erosion or the loss of topsoil?

All Sediment Removal Sites

Removing sediment restores channel bottoms to as-built conditions, thus, reestablishing the original topography of the channels. Topsoil is not found within flood control channels. To control soil erosion during dewatering activities, flows are discharged in a non-erosive manner and construction activities are controlled to prevent erosion into adjacent streams (See BMPs #3 and 4 on Table 3 in **Subsection 2.3**). In addition, downstream areas are monitored for erosion and scour (See BMP #14 on Table 3 in **Subsection 2.3**). This impact is less-than-significant.

All Bank Protection Sites

Bank protection activities occur within channels and are performed in such a manner as to restore the footprint of the eroded bank or to otherwise stabilize the channel; thus, minimizing future soil erosion. Access points are seeded to minimize the loss of topsoil. In addition, flows are bypassed in a nonerosive manner and impounded water is also released in a non-erosive manner (See **Subsection 2.3**). This impact is less-than-significant.

At the East Little Llagas Creek site, the entire length of the work area has experienced severe headcutting as a result of the washout of a grade control structure at Church Avenue (at the downstream end of the proposed project) during high storm flows several years ago. The resulting vertical banks of an incised channel along the entire project length are actively eroding. The proposed work consists of regrading the channel bottom when the channel is dry to eliminate the vertical banks and to create a more stable channel invert. The channel invert grading work will lessen the erosion and water quality threats by eliminating the existing vertical banks during the winter storm flow season. Heavy equipment will push the existing channel soil around to stabilize sections of the channel where down cutting has caused unstable erosion conditions. Existing channel material will be moved into the scoured areas and a shallow low flow channel will be developed.

No soil stabilizing methods or materials are proposed for the East Little Llagas Creek project. Specifically, no erosion blankets or seeding is planned after construction has been completed with the understanding that the existing weed seed bank will quickly reestablish its own vegetation protection. It is acknowledged that some risk is involved the first winter season after regrading is completed because on the amount of exposed soil in the channel bottom. However, the potential reduction of future erosion and water quality impacts due to eliminating the existing vertical banks appears to be much greater than not moving forward with the regrading project. Furthermore, the regrading work completed in August 2000 successfully revegetated from the existing weed seed bank, and provided erosion protection after the first winter season. In conclusion, project impacts would not be significant as they are not different from impacts that would be expected to normally occur at the site without doing the proposed project (existing conditions.)

f-g **f) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse; or, g) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?**

All Sites

Please see response to **4.6 a-d**. Conducting maintenance repairs to existing flood control channels, bank protection areas, or newly eroded areas does not involve the construction of new structures for human occupancy. In fact bank protection prevents landslides and unstable conditions. The 2001 SMP does not involve groundwater pumping which could lead to subsidence. There is no impact to this environmental factor.

At the Los Gatos Creek site upstream of Lincoln Avenue, unstable bank slope conditions are present, and have the potential to exacerbate as a result of the proposed construction. To address this risk to life and or property, the selected alternative project includes the requirement to acquire sufficient property rights on all affected properties prior to construction. These property rights will include provisions including prohibitions on occupancy and land use to assure any substantial risks to life and property are avoided.

h. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

All Sediment Removal and Bank Protection Sites

The 2001 SMP is a flood control maintenance activity and does not result in construction of permanent development that requires septic systems. The project will have no impact.

4.7 HAZARDS AND HAZARDOUS MATERIALS. Would the project:

a&b Create a significant hazard to the public or the environment through a) the routine transport, use, or disposal of hazardous materials or, b) ... reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

All Sediment Removal and Bank Protection Sites

Stream maintenance activities typically involve the use of equipment fueled by petroleum products, which may be hazardous to the aquatic environment if released. The project includes BMPs to prohibit vehicle cleaning at the site prevent/respond to the potential accidental explosions or release of hazardous substances (See BMP #27, 33, 34, 36 and 37 on Table 3 in **Subsection 2.3**). In addition, sediments are tested before removal. If the District finds hazardous substances, we will not reuse the material but take it to a Class I landfill or the sediment "hot spot" is isolated and not removed; thus, minimizing the potential for release.

Sediment within the District's channels has a history of being below established thresholds of significance possibly because the sources of sediment are from the upper watersheds where a consistent source of toxics are not present that could accumulate in the sediments. However, removed sediments from Guadalupe River may be of concern due to mercury pollution issues in the upper watershed. Mercury pollution issues may also be a concern in Randol Creek, due to the historic mining activities that occurred within the watershed, of which 80% is within a former mining area.

The proposed sediment removal project will sample and test for all potential contaminants of concern, and mitigate as required in the Regulatory Authorization necessary for this project. All handling and disposal of sediments will be in accordance with "Waste Discharge Requirements" (WDRs) issued by the California Regional Water Quality Control Board (See BMP #35 on Table 3 in **Subsection 2.3**). Additionally BMP#11 deals specifically with testing and remediation requirements within the Guadalupe River watershed where mercury in soils is a concern (See Table 3 in **Subsection 2.3**). Thus, this impact is less-than-significant.

c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

All Sediment Removal and Bank Protection Sites

The majority of the project sites are not located within a 1/4 mile of an existing or proposed school, except for those sites described below (See **Subsections 2.1.2 and 2.2.2**).

Individual Sediment Removal and Bank Protection Sites

One sediment removal project and four bank protection sites are located within 1/4 mile of a school: Calabazas Creek d/s of 101, Calera Creek upstream of Escuela, Lower Penitencia Creek, Matadero Creek at Josina, and San Tomas Creek. The likely emissions from performing the work is the exhaust from the equipment used, but no toxic or hazardous emissions would result from either sediment removal or erosion repair activities. As noted in **Subsection 4.3** the entire 2001 SMP would not expose sensitive receptors to substantial pollutant concentrations. In addition, the work is located several hundred yards from the nearest school building at any site. However, the access to the Matadero at Josina erosion repair project is through the rear of the Barron Park Elementary school. BMP #29 will be implemented to reduce potential impacts. Work will also likely occur during the summer months when school is not in session. This impact is less-than-significant.

d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

All Sediment Removal and Bank Stabilization Sites

None of the sites are known to be located on a hazardous material site as defined by State law.

e-f For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area; or, f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

All Sediment Removal and Bank Protection Sites

Most of the 2001 SMP sites are not located within an airport land use plan or within 2 miles of a public airport or within the vicinity of a private airstrip, and thus, there is no impact. The Guadalupe River site may be located within a couple of miles of a public airport (San Jose Airport). However, the temporary sediment removal activities at this site would have no effect on aircraft operations nor would it expose workers to hazardous conditions. There is no impact.

g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

All Sediment Removal and Bank Protection Sites

The 2001 SMP is confined to creek channel beds, banks, and levees. None of the levees or maintenance roads are used for emergency response or evacuation. The 2001 SMP does not result in changes to traffic and circulation (See **Subsection 4.15**). Traffic control is provided at all sites (See **Subsection 2.1.2 and 2.2.2**). The 2001 SMP will not impact emergency response or evacuation plans.

h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

All Sediment Removal and Bank Protection Sites

The 2001 SMP is confined to creek channel beds, banks, and levees. Tops of levees are typically devoid of vegetation. When access is created to sites, vegetation is removed. Equipment used for this type of work is typically fitted with spark arresting devices. None of the activities are located in proximity to wildlands. The 2001 SMP will not affect this environmental factor.

4.8 HYDROLOGY AND WATER QUALITY. Would the project:

a & f a) Violate any water quality standards or waste discharge requirements; or, f) Otherwise substantially degrade water quality?

All Sediment Removal Sites

In 1998 and 2000, the District conducted water quality monitoring studies on activities similar to those proposed for the 2001 SMP. Thresholds for water quality violations were established by the SF RWQCB in the WDR issued for the 1998 activities (RWQCB, 1998). The District will be submitting, for administrative approval, a water quality monitoring plan for the proposed 2001 SMP that will be made an element of the WDR issued by the RWQCB, which the District is required to follow.

As part of the 1998 and 2000 water quality monitoring, the District prepared an Information and Data Collection Monitoring report (SCVWD, 1999f). The purpose of this report was to collect water quality data (e.g., metals, salinity) at selected 1998 sites. The water quality data revealed that the stream water within dredged areas was not adversely affected by the sediment removal activity. The District expects similar results for the 2001 sediment removal activities because the 1998 and 2000 sites are comparable in sediment characteristics.

Removal of sediment from flood control channels can temporarily increase sediment load downstream in three ways: (1) installation of diversion structures; (2) removal of diversion structures; and, (3) when ponded water first flows over the recently desilted area. Several BMPs are included in the project to protect water quality and prevent erosion and increased turbidity to include:

- Control of installation and removal diversion structures and protect downstream areas from water quality degradation and erosion (BMP #2 and 3),
- Use of vehicles within the channels that minimizes disturbance to channel bottoms (BMP #5),
- Operation and maintenance of pumps (BMP #6 and 7),
- Utilization of filter fabric in areas where bypass pumping may be creating mobilization of sediments (BMP #8)
- Stockpiling and transporting removed sediments to prevent runoff from flowing back to the channel (BMP #9 and 10),

(See Table 3 in **Subsection 2.3**). Implementing the BMPs, as demonstrated by the District in 1998 and 2000, avoids or minimizes water quality impacts. In addition, vegetation is expected to regrow on the recently desilted areas (SCVWD, 1999d). The result of these efforts is a less-than-significant impact.

All Bank Protection Sites

Unlike sediment removal activities, bank protection activities involve the importing of soil, concrete, rock, rootwads, etc., which do not contain potentially toxic substances. Water quality impacts can potentially occur with the placement of these materials, however, into streams that contain flowing water or when water is released back into the site. Stabilizing banks can temporarily increase sediment load downstream for channels in three ways: (1) installation of diversion structures; (2) removal of diversion structures; and, (3) when ponded water first flows over the repaired area. BMPs included in the 2001 SMP project avoid or minimize this impact to a less-than-significant level (See BMPs #2, 3, 5, 6, 7, and 8 on Table 3 in **Subsection 2.3**).

b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local ground water table level (for example, the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

All Sediment Removal and Bank Protection Sites

Neither sediment removal nor bank protection activities entail the withdrawal of groundwater, interception of an aquifer, or changes to groundwater recharge capability (See **Subsections 2.1.2 and 2.2.2**). The 2001 SMP has no impact on this environmental factor.

c-e c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site; d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; or, e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

All Sediment Removal Sites

Removing sediment from flood control channels does not involve constructing impervious surfaces, changing the vegetative cover of land in the upper watersheds, or compacting large areas of soil that changes soil infiltration rates which could alter drainage patterns nor does this activity create barriers to drainage patterns. All flows are contained within channel banks where they will continue to flow after sediment removal is completed. Removing sediment in existing channels banks does not impact absorption rates, drainage patterns, or the rate and amount of surface water runoff. The purpose of removing sediment is to reduce the existing flood hazard by restoring flood capacity to the improved channels. Thus, the 2001 SMP results in a decreased exposure of people to a flood hazard. There is no impact.

Individual Sediment Removal Site

During sediment removal activities on Matadero Creek, the District is considering using the storm drain system for bypassing flows around the work site. This method was utilized in 1999 at this project location on the Matadero Creek site, u/s of Greer Road with reportedly good results. There is sufficient capacity in the existing storm drain system to accommodate flows during the summer months, which is a period of relatively low storm drainage flows. No improvements are necessary to the storm drain system. There is no impact to the existing storm water drainage system.

All Bank Protection Sites

As with sediment removal, bank protection activities do not involve constructing impervious surfaces, changing the vegetative cover of land in the upper watersheds, or compacting large areas of soil that changes soil infiltration rates nor does the activity create barriers to drainage patterns. Therefore, repairing eroded banks does not impact absorption rates, drainage patterns, or the rate and amount of surface water runoff.

Bank protection activities do reestablish the course of creeks by constructing a bank back to its pre-erosion footprint. The restored bank is constructed in such a way as to conform to the up- and downstream configuration of the existing channel banks. This is not a substantial alteration since the creek is within its historical confines (See **Appendix B**). Earth fill is used in restoring banks and is protected from erosion by the placement of erosion control fabric, seeding, and/or plantings (See **Subsection 2.3**). The purpose of stabilizing eroded banks is to protect adjoining properties from flood hazards and to prevent further degradation of the eroded area. Bank protection activities have a less-than-significant effect on this environmental factor.

g-j g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map; h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows; i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or, j) Expose people or structures to inundation by seiche, tsunami, or mudflow?

All Sediment Removal and Bank Protection Sites

None of the activities included in the 2001 SMP result in construction of permanent habitable structures or development. Rather, sediment removal or bank protection are implemented to prevent flood damage that could result due to lack of channel capacity or to eroded banks. Sediment removal results in a beneficial impact by restoring the flood control capacity of the 2001 SMP channels, while bank protection protects adjoining property or infrastructure. There is no impact to this environmental factor.

4.9 LAND USE AND PLANNING. Would the project:

a. Physically divide an established community?

All Sediment Removal and Bank Stabilization Sites

All of the channels are existing features of the landscape and work occurs within the banks of the channels; thus, the 2001 SMP will not disrupt or divide an established community. The 2001 SMP results in no impact to established communities.

b-c Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or, c) Conflict with any applicable Habitat Conservation Plan or Natural Community Conservation Plan?

All Sediment Removal and Bank Protection Sites

As maintenance activities, the 2001 SMP will not conflict with applicable policies or regulations or surrounding land uses. The 2001 SMP consists of maintaining the capacity of existing flood control channels or stabilizing banks, which will not affect adjacent land uses.

Regulatory agencies which have review or approval authority over the 2001 SMP (as described in **Subsection 1.6**) do not issue permits or approvals unless the 2001 SMP is consistent with their agency policies and regulations. It is the District's judgment that the 2001 SMP is consistent with the plans, policies and regulations of the agencies with jurisdiction over the projects.

In 1993, the Governor of California announced the "California Wetlands Conservation Policy," to ensure no overall net loss of wetlands and to achieve a long-term net gain in the quantity, quality and permanence of wetlands acreage and values in California. The policy also directs state agencies such as the RWQCB and CDFG to develop internal wetlands conservation policies and programs which are compatible with programmatic goals such as flood control. The proposed 2001 SMP does not result in permanent removal of wetland vegetation. The designs of the projects and incorporation of BMPs, and compensatory mitigation minimize conflicts between various policies and the need to provide flood protection to the citizens of Santa Clara County. See also response to **Subsection 4.4.e&f**. This impact is less-than-significant.

4.10 MINERAL RESOURCES. Would the project:

a-b Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state; or, b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

All Sediment Removal and Bank Protection Sites

The 2001 SMP sites are located either in channels previously excavated for flood control purposes or in unimproved channels (See **Subsection 2.1.2 and 2.2.2**). The sites are not within, adjacent to, or near mineral resources or mineral resource recovery sites; thus, there is no impact.

4.11 NOISE. Would the project:

a-b,d Result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies; b) Result in exposure of persons to or generation of excessive ground borne vibration or ground borne noise levels; or, d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

All Sediment Removal and Bank Protection Sites

The noise levels of the project activities will be limited to that of a few heavy vehicles and equipment for temporary periods of time, affecting nearby residents and in some cases schools. There are four 2001 SMP sites that are adjacent to or near schools, but all have short-term durations: Calabazas Creek d/s of 101 (30 days), Calera Creek at Escuela (3 days), Lower Penitencia (18 days), Matadero Creek at Josina (13 days), and San Tomas (18 days). At Calabazas Creek, Mission College is located approximately 1,000 feet easterly of the project area. The work at Calera Creek and Lower Penitencia will be within 100+ feet of school facilities, but the work is short-term. At Matadero Creek, the work site is proposed to be accessed through the rear of the Barron Park Elementary School, but the work site is located 500 feet upstream. Similarly, at the San Tomas site, the Forest Hill Elementary School is located approximately 800 feet upstream of the project area and the Westmont High School is located approximately 1,150 feet upstream.

Noise impacts from use of heavy equipment are limited to the hours of the work typical of other construction and maintenance activities. The duration of exposure is short-term. For sediment removal, equipment is not stationary, but moves along the stream reaches, thereby, exposing each potential receptor for only a short period (a few days). According to information developed by the District for its *Draft Stream Maintenance Program EIR*, a typical residence would be exposed to sound levels of 73 dBA for a couple hours a day for sediment removal activities and 3 to 10 hours for bank protection activities (Santa Clara Valley Water District, March 2001a). A fan will be installed at the Los Coches Creek site inside the culvert, but will be operating only during work hours and would not generate a substantial increase in noise levels given existing street and highway noise in the area.

Thus, temporary and short-term noise increases to residents adjacent to the project sites are considered less-than-significant. Impacts to schools will be minimal given the short-term duration and in most cases distances of the work sites from the facilities. Furthermore, BMPs are incorporated into the project to minimize noise (BMP #24) by notifying local governments of scheduled work (BMP #24) and limiting work to typical weekday hours (BMP #25 (See Table 3 in **Subsection 2.3**). Because the noise resulting from the project activities is short-term and temporary, the impact is considered less-than-significant. Typical equipment used in these type of 2001 SMPs do not result in generation of significant ground borne vibrations.

c. **Result in substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?**

All Sediment Removal and Bank Protection Sites

Flood control maintenance activities have a limited duration and once any individual activity under the 2001 SMP is complete, ambient noise levels return to the various sites.

e-f **e) Result in: for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels; or, f) For a project within the vicinity of a private airstrip, would expose people residing or working in the project area to excessive noise levels?**

All Sites

See **Subsection 4.7 e-f**. The 2001 SMP consists of short-term stream maintenance activities and does not result in the creation of residences or businesses. There is no impact.

4.12 POPULATION AND HOUSING. Would the project:

a. **Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

All Sediment Removal and Bank Protection Sites

The 2001 SMP consists of short-term duration maintenance work on existing channels. It does not result in new construction or population growth and does not require the relocation of work staff to the community that could result in population increases. There is no impact to this environmental factor.

b-c Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; or, c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

All Sediment Removal and Bank Protection Sites

Channel maintenance is completed within the confines of our right-of-way or easements along the channels. Displacement of housing or other structures to complete the work does not occur. There is no impact to these environmental factors.

4.13 PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or need for new or physical altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

a-e a) Fire protection; b) Police protection; c) Schools; d) Parks; or, e) Other public facilities?

All Sediment Removal and Bank Protection Sites

The 2001 SMP consists of routine maintenance activities within the District's jurisdiction. These temporary activities and associated work crews do not have an impact on fire or police protection services. The 2001 SMP does not involve new permanent construction and will bring no new students to the area, require no new school facilities, or impact parks/recreation facilities or other governmental services (See **Subsection 4.9 and 4.12**). There is no impact from the project to the public services listed above.

4.14 RECREATION. Would the project:

a-b a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or, b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

All Sediment Removal and Bank Stabilization Sites

The 2001 SMP consists of routine flood control maintenance activities and does not increase or alter the population of the area (See **Subsection 4.9 and 4.12**) which would lead to an increase in the use of recreational facilities at either a local or regional scale or affect existing recreational opportunities. The 2001 SMP does not impact the environmental factors noted above.

There are several project sites, however, where public trail access is provided on levees or maintenance roads. The Adobe Creek sediment removal project is along a section of public trail. The Guadalupe Slough erosion repair project is along a section of the San Francisco Bay Trail. Maintenance roads along Matadero Creek are also used by pedestrians, and the banks of the E. Little Llagas Creek are used informally by equestrians. For the trails on Adobe, Matadero, and Guadalupe Slough, the District is proposed to keep the trails at least partially open during the construction period, using signage and flagging, if necessary. Construction at all three sites is very short-term (8-15 days at each site), and the temporary disruption of access is not considered significant. The work at East Little Llagas Creek will not disrupt trail use adjacent to the banks. Additionally, BMP #30 incorporated into the project requires installation of warning signs near trails (See BMP#30 on Table 3 in **Subsection 2.3.**). In conclusion, there are no significant or adverse impacts with the implementation of the BMPs, signage and flagging.

4.15 TRANSPORTATION/TRAFFIC. Would the project:

a-b a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (for example, result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections); or, b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

All Sediment Removal Sites

The 2001 SMP will result in minor traffic increases associated with workers traveling to and from the worksite over the duration of each activity as well as trucks going to and from sediment removal sites and dump areas. It is estimated that project activities will result in approximately 20 trips per day at smaller work sites, and up to 50 trips per day at larger work sites. The majority of the truck trips will be during off-peak hours. Trips at specific locations will be scattered throughout the day and various intersections. Given the temporary and short-term duration of the activities, project traffic at individual sites will not result in significant traffic increases on local streets, and this will be a less-than-significant impact in relation to existing traffic volumes. Traffic control is one of the BMPs incorporated into the 2001 SMP (See BMP#30 on Table 3 in **Subsection 2.3**).

All Bank Stabilization Sites

As with sediment removal activities, truck traffic will temporarily increase and to a lesser extent so will vehicular traffic to the site. The District will provide traffic control (See **Subsection 2.3**). The District expects this to be a less-than-significant impact considering the number of vehicular trips made in Santa Clara County.

Access to the Stevens Creek at Highway 85 project site will be from a staging area along Highway 85. The staging area will be accessed from an existing gate along Highway 85. An encroachment permit from Caltrans will likely be required. Traffic control will be completed per Caltrans standards for equipment and trucks exiting and entering freeway lanes, including preparation of a Traffic Management Plan (TMP) for Caltrans review.

c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location, that results in substantial safety risks?

All Sediment Removal and Bank Stabilization Sites

The various activities covered under the 2001 SMP are implemented for flood control maintenance and have no effect on air traffic patterns (See **Subsection 4.7 e-f and g**).

d. Substantially increase hazards due to a design feature (for example, sharp curves or dangerous intersections) or incompatible uses (for example, farm equipment)?

All Sediment Removal and Bank Stabilization Sites

The 2001 SMP does not require any changes to roadway or intersection design or result in incompatible uses (See **Subsections 2.1.2 and 2.2.2**). Access is provided by existing streets, maintenance roads, and pedestrian/bicycle trails. Maintenance roads are designed for moving vehicles and equipment on them. The purpose of the 2001 SMP is to reduce flooding hazards by removing sediment or bank erosion hazards by installing engineered bank protection techniques. There is no impact to this environmental feature.

e. Result in inadequate emergency access?

All Sediment Removal and Bank Stabilization Sites

The 2001 SMP is a temporary maintenance activity. Work activities take place predominately on maintenance roads or within channels. BMPs are included to provide traffic control where needed (See **Subsections 2.3**).

f-g f) Result in inadequate parking capacity; or, g) Conflict with adopted policies, plans, or programs supporting alternative transportation (for example, bus turnouts, bicycle racks)?

All Sediment Removal and Bank Stabilization Sites

Parking of vehicles (usually a few District vehicles and possibly a few private automobiles) during the day would occur on the maintenance roads and the street immediately closest to an individual activity. Heavy equipment, such as excavators are left on-site during the duration of the activity but not on a public street. Once the activity is completed, the District vacates the area. The 2001 SMP is temporary in nature and would not generate a long-term or permanent demand for existing or new parking (See **Subsections 4.9 and 4.12**).

The 2001 SMP takes place within channels and does not require any changes to roadway design or permanently generate increased vehicle trips or traffic congestion, where having alternative forms of transportation may be desirable (See **Subsections 4.9, 4.12 and 4.15 a-b**). There will be no impact to these environmental factors.

4.16 UTILITIES AND SERVICE SYSTEMS. Would the project:

a-e a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board; b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed; e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's demand in addition to the provider's existing commitments?

All Sediment Removal and Bank Stabilization Sites

The 2001 SMP consists of sediment removal or bank protection activities which are activities that do not result in the need for new systems, supplies or alterations to the aforementioned utilities because they do not result in population growth; nor, does the 2001 SMP generate storm water needs (See **Subsection 4.9 and 4.12**). The 2001 SMP will have no effect to these environmental factors.

f-g f) Be served by a landfill with sufficient permitted capacity to accommodate the 2001 SMP's solid waste disposal needs; or, g) Comply with federal, state, and local statutes and regulations related to solid waste?

All Sediment Removal and Bank Stabilization Sites

Sediment removed from the channels will be disposed of at area landfills as it has in the past, if a reuse cannot be found. Any off-haul associated with the bank protection activities will also be taken to area landfills. Disposal will not result in the need for new landfills or alter the current waste system. The District complies with all statutes and regulations pertaining to solid waste. There will be a less-than significant impact to these environmental factors.

4.17 MANDATORY FINDINGS OF SIGNIFICANCE

a. **Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?**

All Sediment Removal and Bank Stabilization Sites

The environmentally sensitive designs of the various activities and BMPs incorporated into the 2001 SMP descriptions avoid and minimize impacts to the environmental factors listed above (See **Subsections 2.3, 4.3, 4.4, 4.5, 4.8 and 4.11**); thus, the 2001 SMP will have less-than-significant impacts to the aforementioned environmental factors.

b. **Have impacts that are individually limited, but cumulatively considerable? ("cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of the past projects, the effects of other current projects, and the effects of probable future projects.)**

All Sites

A cumulative analysis of the 2001 SMP requires evaluating the effects of the proposed project along with effects of past, present and future activities on the project streams that are reasonably foreseeable. There are three categories of potential impact; combined 2001 Stream Maintenance Projects, long term District maintenance, and potential impacts from other projects on the creeks other than maintenance (Capital Improvement Projects and non-District projects.)

2001 Stream Maintenance Projects

The 2001 SMP will result in removal of 2.13 ~~1.86~~ acres of tidal wetland vegetation and 2.14 ~~2.45~~ acres of nontidal vegetation. Three of the proposed projects are in areas in which the District conducted sediment removal activities in 1997 or 1998. These "repeat" projects account for ~~0.26~~ 0.27 acres of tidal wetland (Berryessa, Milpitas Boulevard to Calaveras~~, Sierra Creek d/s to Mauna Kea~~) and 0.16 acres of non-tidal wetland (Berryessa, Cropley-Sierra and Sierra Creek d/s Mauna Kea). The District has already provided wetland mitigation for the impacts of those projects and will therefore not provide any mitigation for those projects at this time. The erosion repair projects will result in non-tidal wetland impacts of 0.05 acres. These impacts are from two project located in the Uvas/Llagas Watershed (South Watershed). These impacts will not be considered significant due to their size. There will not be any compensatory mitigation for these impacts.

Thus, the compensatory mitigation for the sediment removal projects for the 2001 SMP is proposed to be 1.86 ~~1.59~~ acres of tidal wetland and 1.98 ~~2.24~~ acres of non-tidal wetland. This approach is consistent with the Stream Maintenance Program and its draft Environmental Impact Report (EIR).

The District has concluded that the individual small stream maintenance projects do not have a significant effect on wetlands and their associated wildlife resources primarily as a result of the rapidity in which the wetlands regrow and the small amount removed when compared to the larger amount of wetlands maintained and created within regional flood control channels. However, it is also recognized that there is a potential for cumulative impacts when all the individual stream maintenance projects are combined and projected into the future.

Long Term District Maintenance

The Multi-Year Stream Maintenance Program EIR evaluates the cumulative effects of routine stream maintenance. Specific measures, protocols, monitoring and reporting requirements are included to avoid or minimize environmental effects. Mitigation will be provided to compensate for any residual significant impacts. The District believes the program EIR is the best location to evaluate cumulative effects of routine stream maintenance. For the purposes of complying with CEQA and resolving this matter without further delay, the District is assuming that the 2001 Stream Maintenance Project may result in significant cumulative impacts, thus requiring mitigation. The mitigation proposed herein will be incorporated into the mitigation package developed for the Multi-Year Stream Maintenance Program EIR.

The proposed mitigation is consistent with the compensatory mitigation proposed in the District's *Draft Stream Maintenance Program* and EIR. Implementation of the multi-year maintenance program would cause temporary but repetitive impacts to 116 acres of freshwater wetlands, 30 acres of tidal wetlands, and 78 acres of in-stream riparian vegetation due to sediment removal and vegetation management in stream channels (Santa Clara Valley Water District, March 2001b). The proposed mitigation provides for: 1) tidal wetland restoration; 2) freshwater wetland creation; 3) stream and watershed protection; and 4) control of giant reed (Ibid.). The wetland components are summarize below:

- 30 Acres Tidal Restoration at former Cargill Pond A-4 – Planning and design phases are currently underway, and construction is expected to begin in 2006. The first phase of restoration will consist of 40 or more acres (Ibid.)

- 10 Acres Freshwater Restoration at Los Capitancillos (3 acres) and Coyote Lakes Park Site 10 (7 acres) in the Santa Clara Basin – The Los Capitancillos wetland creation site is currently under design and is expected to be installed in the year 2002. Mitigation design and planning is underway for the Coyote Lakes Park Site, and construction is anticipated to begin in 2005.

- 4 Acres Freshwater Restoration at the Church Pond site in the Pajaro River Basin – The wetland creation site is proposed by converting open water at the Church Avenue groundwater recharge ponds into approximately 4 acres of freshwater wetland. Construction is expected to begin in 2003.

The 2001 SMP projects will contribute to mitigation requirements from annual maintenance projects for the years 1996 to 2000 as summarized on Table 7. As can be seen, cumulative wetland mitigation requirements for these projects, including the 2001 SMP total ~~6.2~~ 5.94 acres of freshwater wetland and ~~14.2~~ 14.45 acres of tidal wetland. These are accounted for in the total wetland compensatory acreage proposed as part of the District's multi-year *Draft Stream Maintenance Program.*

TABLE 7
Wetland Mitigation Commitments for Completed Annual Maintenance Projects

Project	Mitigation Acres		Proposed Mitigation Site
	Non-Tidal	Tidal	
1996 Bank Protection, 6 sites	0.15		Include in 10-year permit (per USACE)
1996 Wildcat & Uvas Bank Protection	0		Include in 10-year permit (per USACE)
1997 Urgent Sediment Removal	0.60		Los Capitancillos
1997 Urgent Sediment Removal		10.0	Pond A-4
1997 San Tomas Addition, Sediment Removal	0.20		Include in 10-year permit (per USACE)
1997 Jones & Morey, Sediment Removal	1.10		Church Pond No. 2
1998 Maintenance Projects		1.80	Pond A-4
2000 Maintenance Projects	1.91		Los Capitancillos
2000 Maintenance Projects		0.79	Pond A-4
Subtotal	*3.96*	*12.59*	
2001 SMP	1.98 ~~2.24~~		Los Capitancillos & Coyote Lakes
2001 SMP		1.86 ~~1.59~~	Pond A-4
Total	**5.94 ~~6.2~~**	**14.45 ~~14.2~~**	

All of the 2001 SMP sediment removal projects and their impacts are in the San Francisco Bay watershed (North County); therefore the compensatory mitigation must be located in that watershed. The ~~1.59~~ 1.86 acres of tidal wetland impacts will be mitigated at the proposed Cargill Pond A-4 mitigation site. ~~0.50~~ 0.14 acre of non-tidal wetland will mitigated at the proposed Los Capitancillos mitigation site and the remaining ~~1.74~~ 1.84 acres at the proposed Coyote Parkway Mitigation Site. If the Los

Capitancillos site cannot provide the ~~full 0.50 acre~~ allotted amount, the mitigation at the Coyote Parkway Mitigation Site will be increased. (Note: The Coyote Parkway Mitigation Site is expected to yield approximately ~~9~~ 7 acres of wetland mitigation.)

As described further in **Subsection 5.0** below, preliminary wetland mitigation plans have been prepared, and the District is moving forward with implementation. There will be a period of time between the time that the project activities occur and the date in which the wetland mitigation is completed. However, as discussed above and in **Subsection 4.4.c**, sites where sediment removal has occurred have shown substantial, if not complete, regrowth within 1 to 2 years. Thus, it is likely that some of the sites in the 2001 SMP will have substantially recovered prior to final implementation of the District's wetland mitigation plans.

Mitigation

2. Include the total 2001 SMP temporary wetland loss acreage within the District's tidal and freshwater wetland compensatory mitigation projects, to include ~~1.59~~ 1.86 acres of tidal wetland mitigation and ~~2.24~~ 1.98 acres of freshwater wetland mitigation.

Projects Other Than Maintenance

Additional actions by the District and many others are taken into account for the cumulative analysis where relevant. The District is currently planning and designing several flood protection projects (listed in Table II-10 of the SMP EIR, incorporated herein). In each case, these capital improvement projects are subject to an environmental review and will as necessary mitigate incremental impacts on the channels to levels of environmental insignificance. Therefore, any potential cumulative effects will be avoided or mitigated by the future capital improvement projects during their CEQA review.

The Total Maximum Daily Load (TMDL) program is a District cumulative activity, but future TMDL will not increase environmental impact of routine maintenance. This program will reduce impact by imposing additional water quality protection measures as necessary.

Other minor activities by others in the District facilities are taken into account by the District in its permit review process. Refer to Chapter II.E.4. of the SMP EIR. Definition of Potential for Cumulative Impact for a list of current major stream projects by others and a summary of the general amount of such projects reviewed by the District each year. The District comments on new projects proposed by other agencies or property owners within 50 feet of a creek to determine if they will affect the flow of water, collect debris, or will adversely affect the ability of channel banks to carry flood waters or resist erosion (District Ordinance 83-2). The District encourages projects to be designed so as to avoid unstable bank conditions, large increases in discharge, or conditions that might cause pollution. Additionally, the District and the various cities participated in a Non-Point Source Control Program as defined in Section III of the

SMP EIR. One of the main purposes of District review of channel encroachment and construction by others in and near channels is to prevent incorrectly designed or poorly installed work from causing channel sedimentation or bank failure. These stream projects by others are not expected to cumulatively result in additional impacts along with the SMP 2001 projects. By reviewing these other projects under its permit program, the District is able to avoid any significant effects to the streams.

c. **Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?**

All Sediment Removal and Bank Stabilization Sites

The 2001 SMP would either have no impact or less-than-significant impacts to environmental effects, which could cause substantial adverse effects on humans either directly or indirectly. See the discussions related to the following environmental factors: aesthetics (**4.1**), agricultural resources (**4.2**), air quality (**4.3**),cultural resources (**4.5**), geology/soils (**4.6**), hazards and hazardous materials (**4.7**), hydrology/water quality (**4.8**), land use/planning (**4.9**), mineral resources (**4.10**), noise (**4.11**), population/housing (**4.12**), public services (**4.13**), recreation (**4.14**), transportation and circulation (**4.15**), and utilities and service systems (**4.16**). The 2001 SMP activities were designed to avoid or minimize effects from the earliest stages of activity conceptualization. Furthermore, the District incorporated BMPs into the project description regardless of an activity's potential for significant effect as part of the District's commitment to environmental stewardship.

5.1 2001 SMP MITIGATION MONITORING PLAN

Mitigation 1: ~~Complete field surveys~~ Conduct pre-construction surveys for California red-legged frogs ~~and salt marsh harvest mice at sites with potential habitat (see Table 5), using U.S. Fish and Wildlife Service survey protocols~~. at the Calabazas Creek downstream of Highway 101 (sediment removal) and Matadero Creek at Josina Avenue (bank stabilization) projects due to presence of the species in upsteam locations. If found, the District shall implement a relocation plan and other protectionmeasures, in consultation with U.S. Fish and Wildlife Service. ~~If any project site is found to have a potential impact to either species, that project will be eliminated from the 2001 SMP Project List and final IS/MND before adopted of the MND, in order to avoid impacts to endangered species.~~

Responsibility: District biologists are responsible for conducting surveys in accordance to agency protocols.

Timing: ~~May 2001,~~ Summer 2001 prior to initiation of project activities at the two identified sites

Performance Standards: If endangered species are found at surveyed sites, ~~these sites will be eliminated from the 2001 project list to avoid impacts.~~ the District shall implement a relocation plan and other protection measures, in consultation with U.S. Fish and Wildlife Service

Mitigation 2: Include the total 2001 SMP temporary wetland loss acreage within the District's tidal and freshwater wetland compensatory mitigation projects, to include ~~1.59~~ 1.86 of tidal wetland mitigation and ~~2.24~~ 1.98 acres of freshwater wetland mitigation.

Responsibility: Santa Clara Valley Water District staff are responsible for including the calculations for wetland mitigation in the design and engineering plans for the Los Capitancillos, Coyote Parkway Site and Cargill Salt Pond A-4 Mitigation Sites.

~~The wetland impacts resulting form the sediment removal at Calabazas Creek downstream of Highway 101 are currently designated as non-tidal wetlands and are proposed to be mitigated at nontidal mitigation sites. District staff believes that a portion of this reach of Calabazas Creek may contain tidal wetlands. Further field surveys will be conducted to determine the tidal/nontidal interface. The mitigation may be re-allocated in the final IS/MND to provide in-kind mitigation at the appropriate mitigation site.~~

The Mitigation Monitoring Plans used in preparation of the IS/MND are available for review at Santa Clara Valley Water District Headquarters Building, 5750 Almaden Expressway, San Jose, California. Please call (408)-265-2607, extension 2702 to make an appointment to review reference documents during business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday.

Timing: Measure to be included at the time design plans are developed; the plans for the Los Capitancillos site currently are being prepared.

Performance Standards: None are required to include acreage calculations within existing mitigation plans. The June 1998 Wetland Mitigation and Monitoring Plan sets forth the general criteria for habitat conditions that will be created. Subsequent site-specific design and engineering plans will detail the specific performance criteria for implementation.

5.2 BACKGROUND

In June 1998, the District prepared the *Urgent Sediment Removal Project Compensatory Wetlands Mitigation and Monitoring Plan* for the Los Capitancillos Freshwater Wetlands Mitigation Site and Pond A-8 Tidal Wetlands Mitigation Site (SCVWD). The plan identifies the types, functions and values of the wetland habitat to be created at each site and sets forth a preliminary implementation plan. The plan was prepared to provide mitigation for the 1997 sediment removal project impacts, and was submitted to the U.S. Army Corps of Engineers and the California Regional Water Quality Control Board in accordance with permit requirements. The District is moving forward with implementation of both projects as discussed below. Both sites have adequate area for mitigation for the cumulative 2001 SMP wetland impacts.

2001 SMP tidal wetland impacts will be mitigated by restoring ~~1.59~~ 1.86 acres of tidal wetland at the Cargill Salt Pond A-4 Mitigation Site. This site contains approximately 300 acres available for wetland mitigation/restoration. Tidal mitigation requirements to date total ~~12.69~~ 12.59 acres (see Table 7 in **Subsection 4.17**), and 14.45 acres with the 2001 SMP. The multi-year Stream Maintenance Program proposes 30 acres of compensatory mitigation, including past years mitigation. The Pond A-4 site will provide tidal wetland mitigation opportunities for the future as well. Planning and design plans are underway.

Nontidal wetland impacts will be mitigated at the Los Capitancillos (3 acres) and Coyote Parkway Sites (9 acres). Nontidal wetland mitigation requirements to date total 3.96 acres (see Table 7 in **Subsection 4.17**), and 6.2 acres with the 2001 SMP. Planning and design is underway.

SECTION 6. DOCUMENT CONTRIBUTORS

The professional judgment and expertise of the following document contributors is incorporated throughout the Initial Study/Mitigated Negative Declaration.

Jae Abel	Fisheries Biologist
Tim Bramer	Civil Engineer
Jason Christie	Unit Supervisor
Melissa Dargis	Environmental Planner
Sherwood Garcia	Office Specialist
Tiffany Hernandez	Fisheries Biologist
Scott Katric	Civil Engineer
Suzy Leach	Engineering Technician
Uday Mandlekar	Senior Engineer
Doug Padley	Wildlife Biologist
Gale Rankin	Botanist
Kenn Reiller	Civil Engineer
Cindy Roessler	Environmental Planner
David Salsbery	Fisheries Biologist
Bill Smith	Environmental Planner
Louisa Squires	Wetland Vegetation Biologist

CONSULTANTS

Biotic Resources Group, Kathy Lyons, Wetland Assessments
Strelow Consulting, Stephanie Strelow, Initial Study Preparation
Logan Design Services, Lezli Logan, Graphics
H.T. Harvey, Sara Chun, Mitigation Monitoring Plan

SECTION 7. REFERENCES

7.1 REFERENCES

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Biotic Resources Group. April 2001. Wetland Assessment for the 2001 Stream Maintenance Project. Prepared for the Santa Clara Valley Water District. San Jose, CA.

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_______. 1997b. Letter (1-1-97-TA-2108) to the Santa Clara Valley Water District on the Lower Silver Creek, Downstream San Antonio St., and Potential Impacts to the California Red-legged Frog.

7.2 REGULATORY AGENCY FIELD TRIPS

2001 Stream Maintenance Project Field Trips (March 21 and March 29, 2001.)
Regulatory Agency Attendees: Cecilia Brown (USFWS), Kimberly Gonzalez (Central Coast RWQCB), Erika Cleugh (CDFG), Richard Smith (USFWS), and others: Keith Anderson (Streams for Tomorrow.)

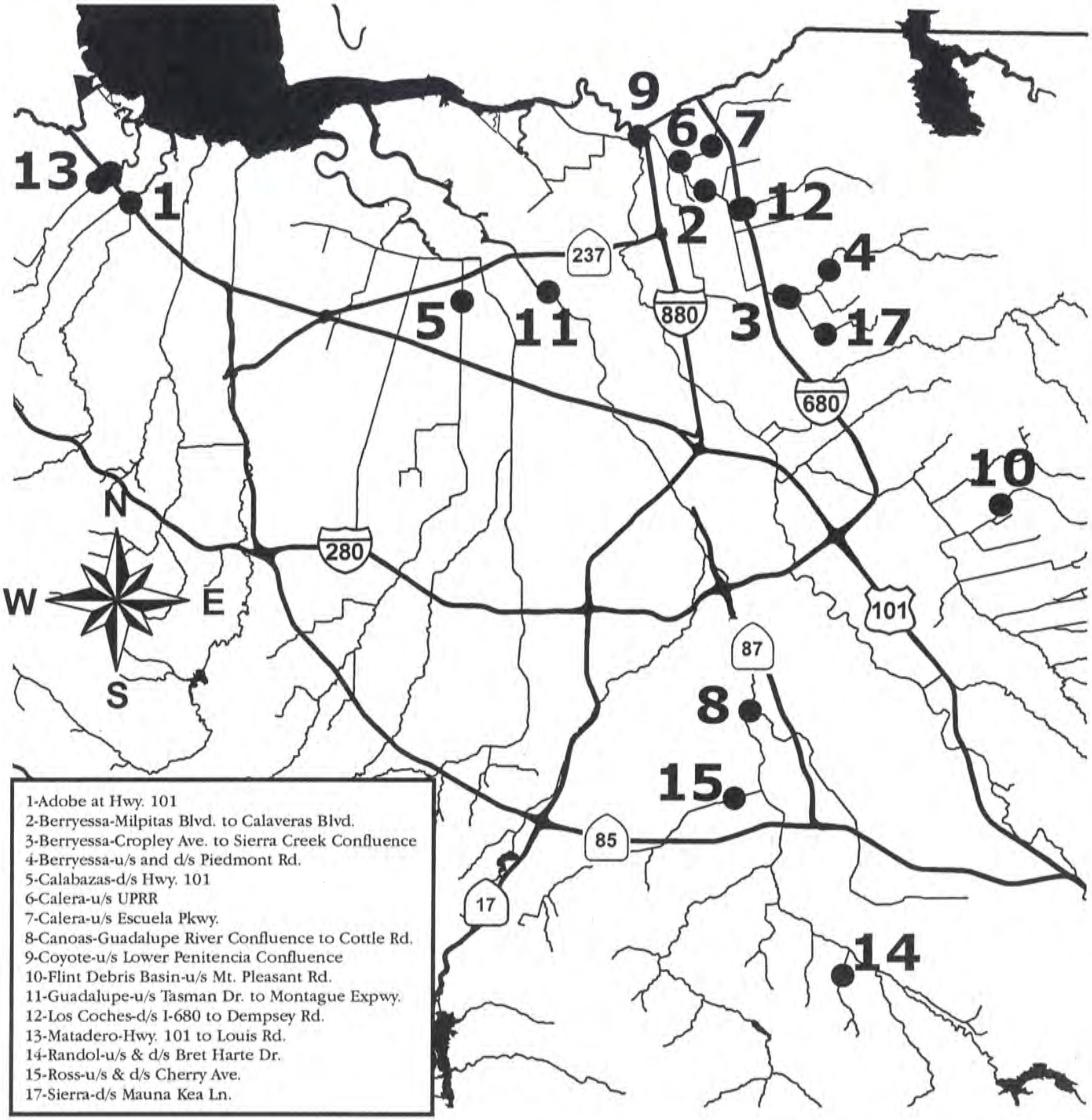
7.3 LESSONS LEARNED MEETING

2000 Stream Maintenance Lessons Learned Meeting (February 26, 2001.) The following non-District attendees were present: Kimberly Gonzales (Central Coast RWQCB), Lee Miles (San Francisco Bay RWQCB), Margaret Roper (CDFG), Robert McMurtry (RWQCB), and others: Laura Kennedy (Kennedy/Jenks Consultants), Vivian Blomenkamp (League of Women Voters), Keith Anderson (Streams for Tomorrow), Trish Mulvey (CLEAN South Bay), and Janet Serrano (CWW-Flycasters.)

APPENDIX A

SEDIMENT REMOVAL: VICINITY AND PLAN VIEW MAPS AND TYPICAL PLAN OR CROSS-SECTIONS AND PHOTOS

Vicinity Map for Sediment Removal Projects-North County



1-Adobe at Hwy. 101
2-Berryessa-Milpitas Blvd. to Calaveras Blvd.
3-Berryessa-Cropley Ave. to Sierra Creek Confluence
4-Berryessa-u/s and d/s Piedmont Rd.
5-Calabazas-d/s Hwy. 101
6-Calera-u/s UPRR
7-Calera-u/s Escuela Pkwy.
8-Canoas-Guadalupe River Confluence to Cottle Rd.
9-Coyote-u/s Lower Penitencia Confluence
10-Flint Debris Basin-u/s Mt. Pleasant Rd.
11-Guadalupe-u/s Tasman Dr. to Montague Expwy.
12-Los Coches-d/s I-680 to Dempsey Rd.
13-Matadero-Hwy. 101 to Louis Rd.
14-Randol-u/s & d/s Bret Harte Dr.
15-Ross-u/s & d/s Cherry Ave.
17-Sierra-d/s Mauna Kea Ln.

PURPOSE: To remove sediment from flood control channels to restore capacity.

VICINITY MAP

8000 0 8000 16,000 Feet

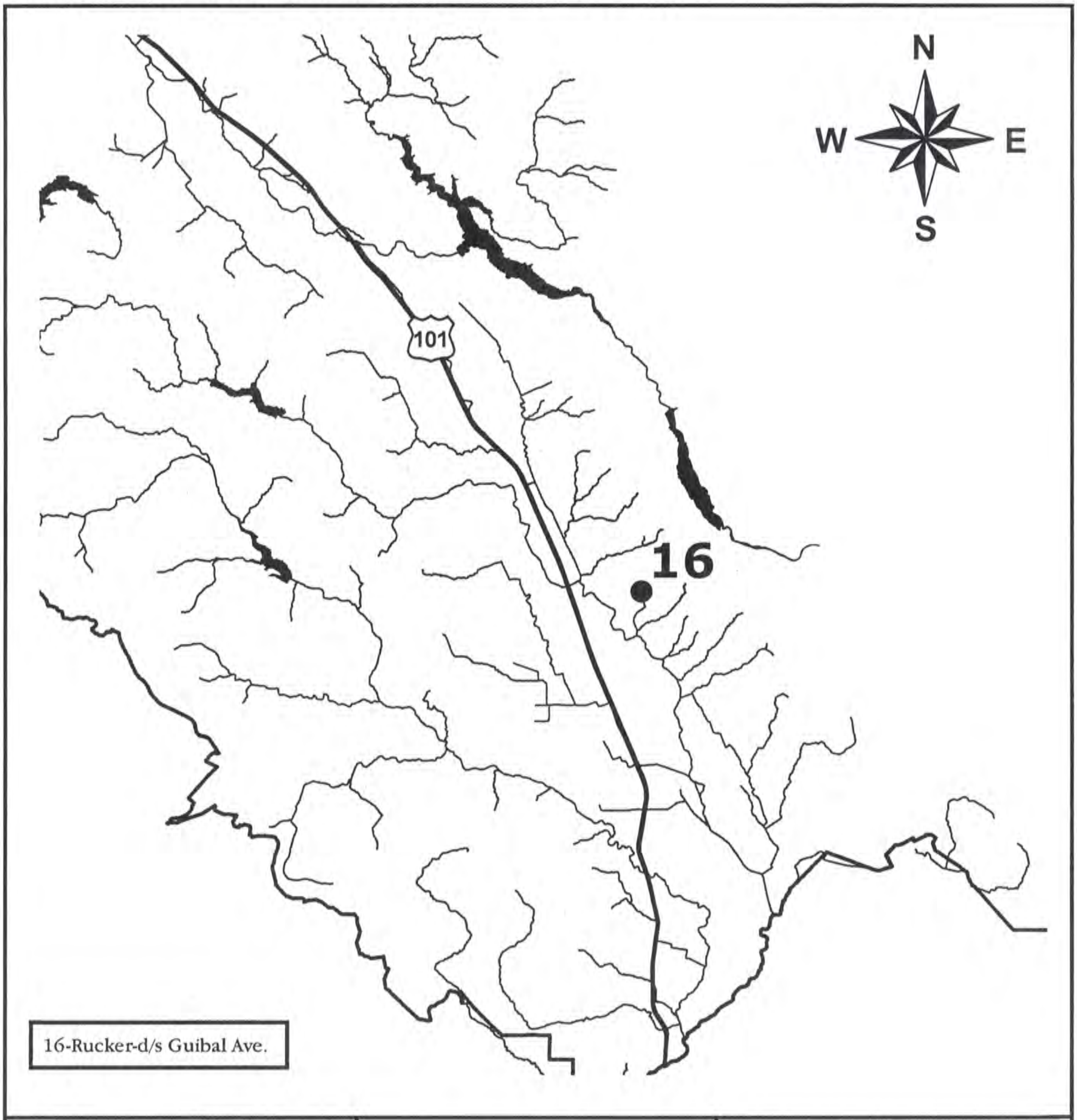
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:

COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley
Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Vicinity Map for Sediment Removal Projects-South County



PURPOSE: To remove sediment from flood control channels to restore capacity.

VICINITY MAP

8000 0 8000 16,000 Feet

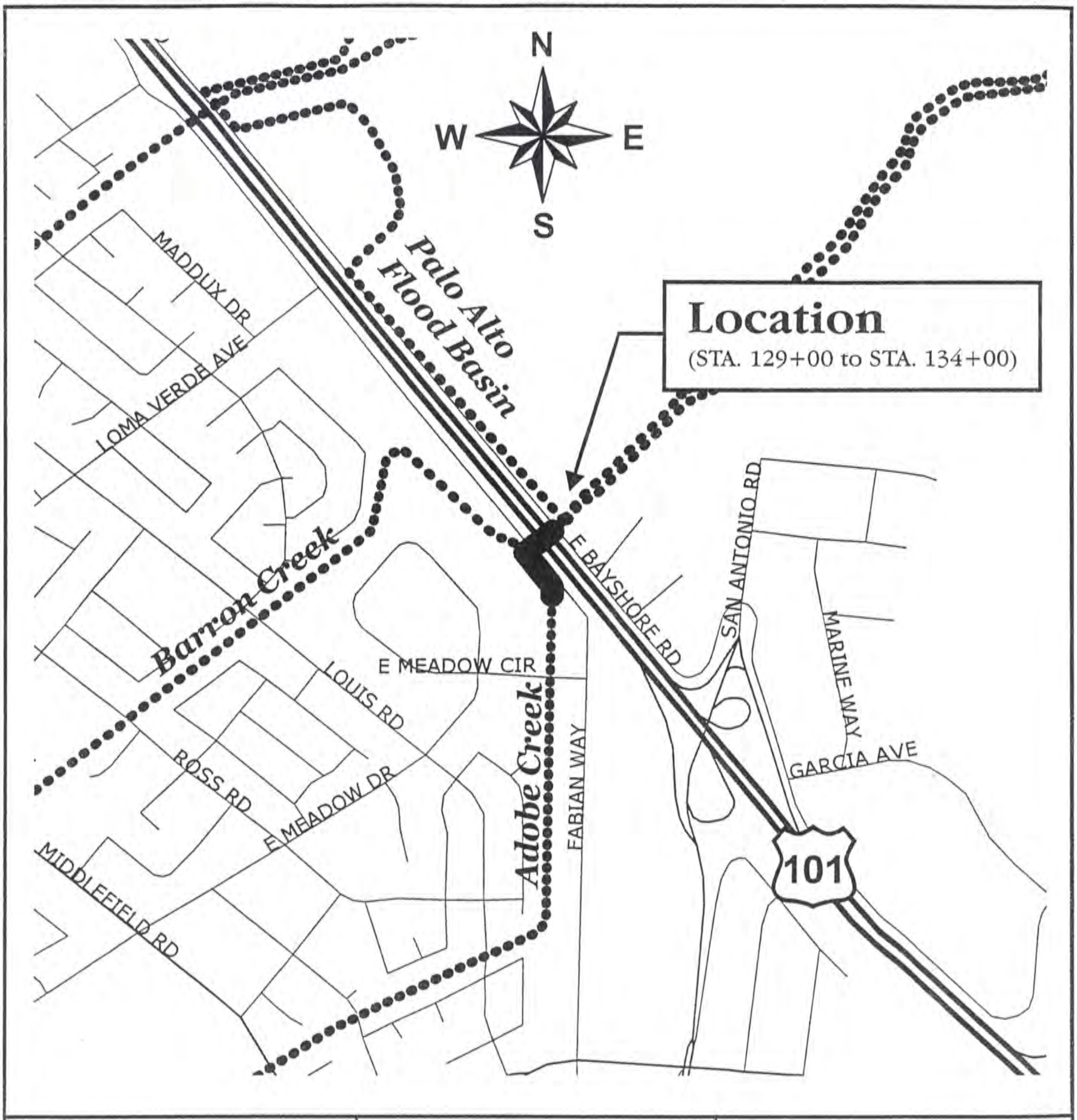
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:

COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley
Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure A-1a-Vicinity Map, Adobe Creek at Highway 101



PURPOSE: To remove sediment from flood control channels to restore capacity.

VICINITY MAP

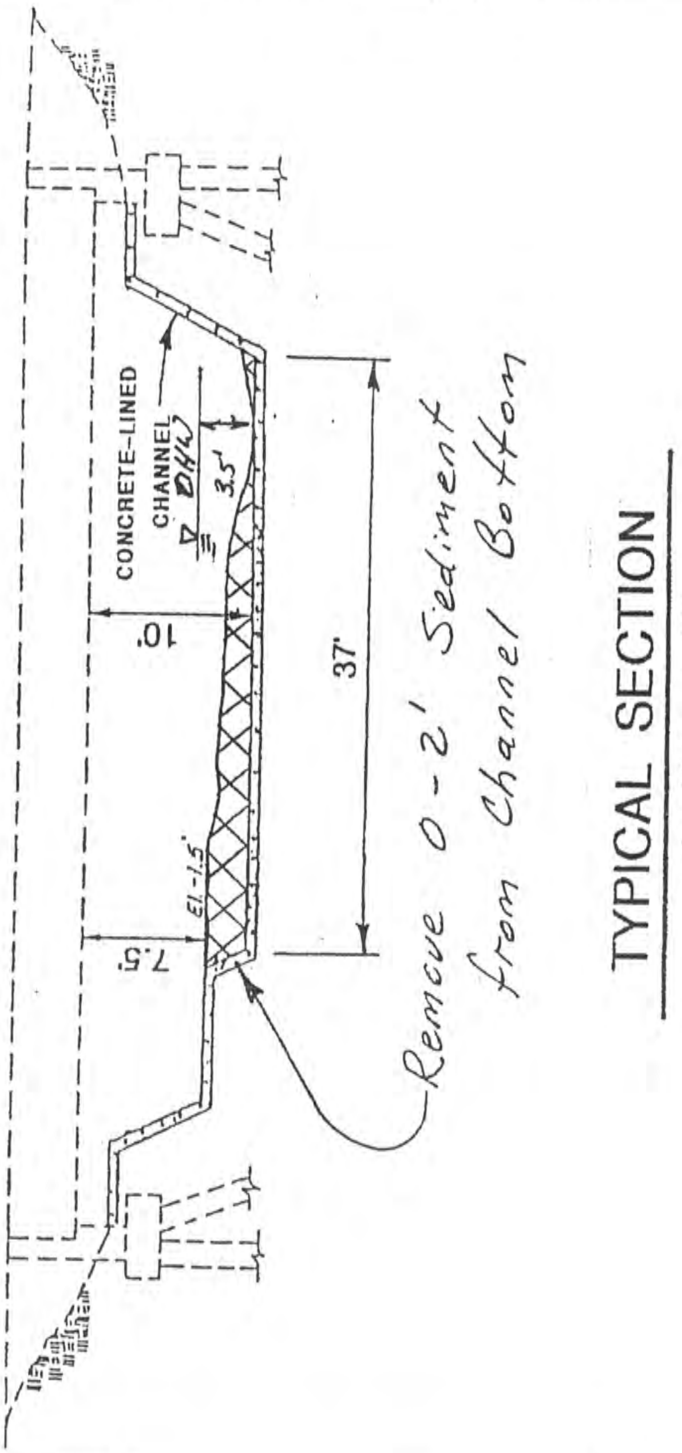
500 0 500 1000 Feet

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:
Adobe Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

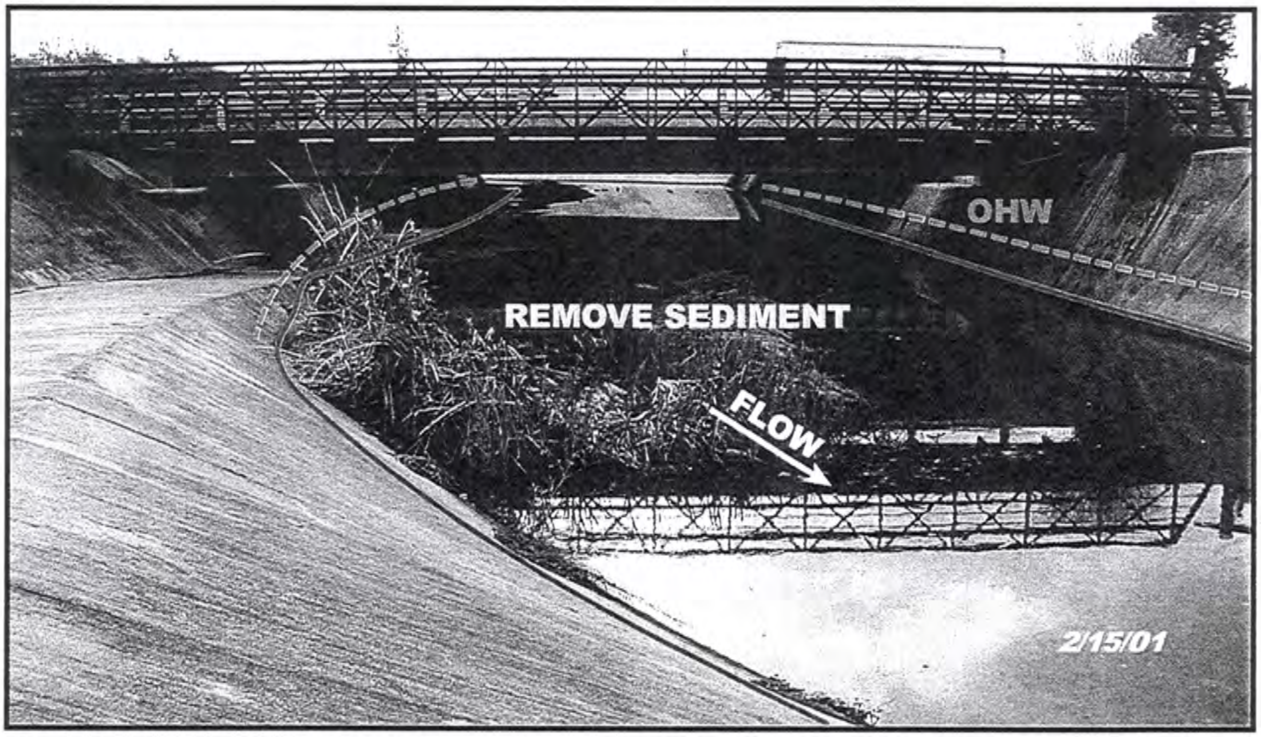
Figure A-1b-Typical Section, Adobe Creek at Highway 101



PURPOSE: To remove sediment from flood control channels to restore capacity.	TYPICAL SECTION Not to scale Santa Clara Valley Water District 5750 Almaden Expressway San Jose, California 95118 www.scvwd.dst.ca.us	*PROPOSED SEDIMENT REMOVAL IN:* Adobe Creek *COUNTY OF:* Santa Clara *APPLICATION BY:* Santa Clara Valley Water District *DATE:* May 2001

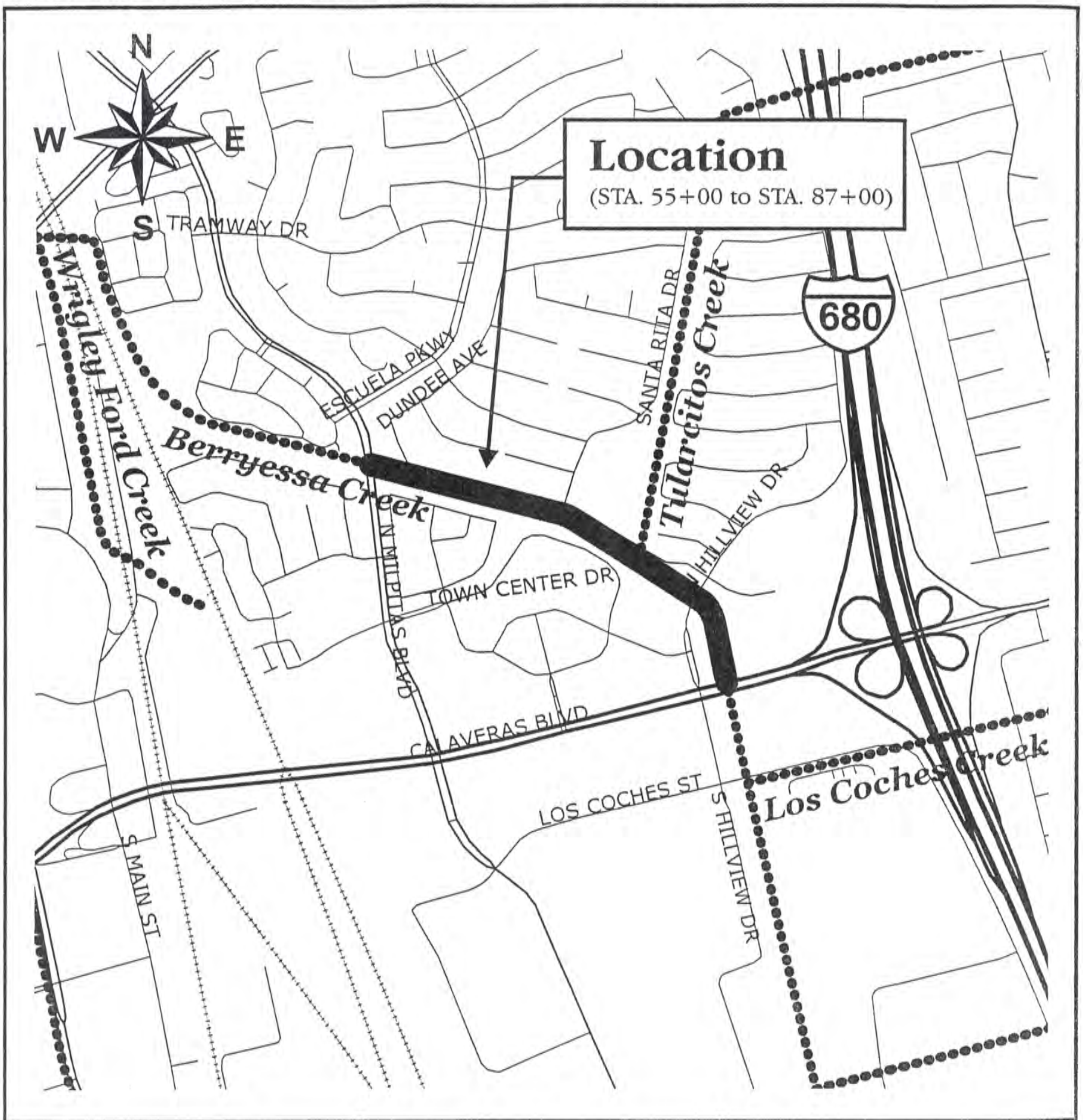
04/27/2001 11:00 a.m.

Figure A-1c - Adobe Creek at Highway 101.



View 1 - Downstream of Highway 101 looking upstream toward Highway 101 and East Bayshore Road. Project includes removal of approximately 1,000 cubic yards of sediment in concrete-lined channel. *(Adobe View1 (Site1).jpg)*

Figure A-2a-Vicinity Map, Berryessa Creek, Milpitas Blvd. to Calaveras Blvd.



PURPOSE: To remove sediment from flood control channels to restore capacity.

VICINITY MAP

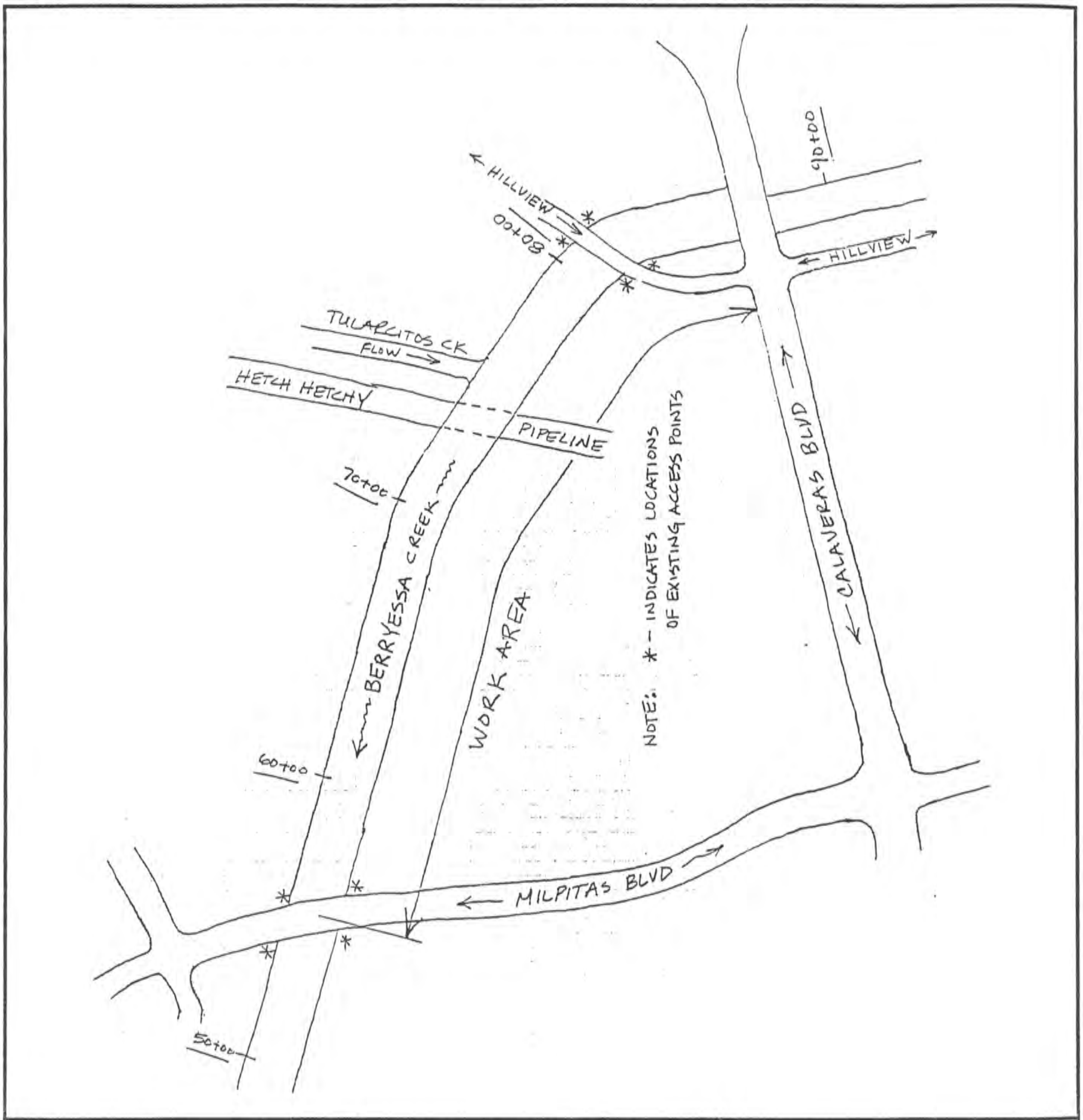
500 0 500 1000 Feet

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:
Berryessa Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley
Water District
DATE: May 2001

04/27/2001 11:00 a.m.

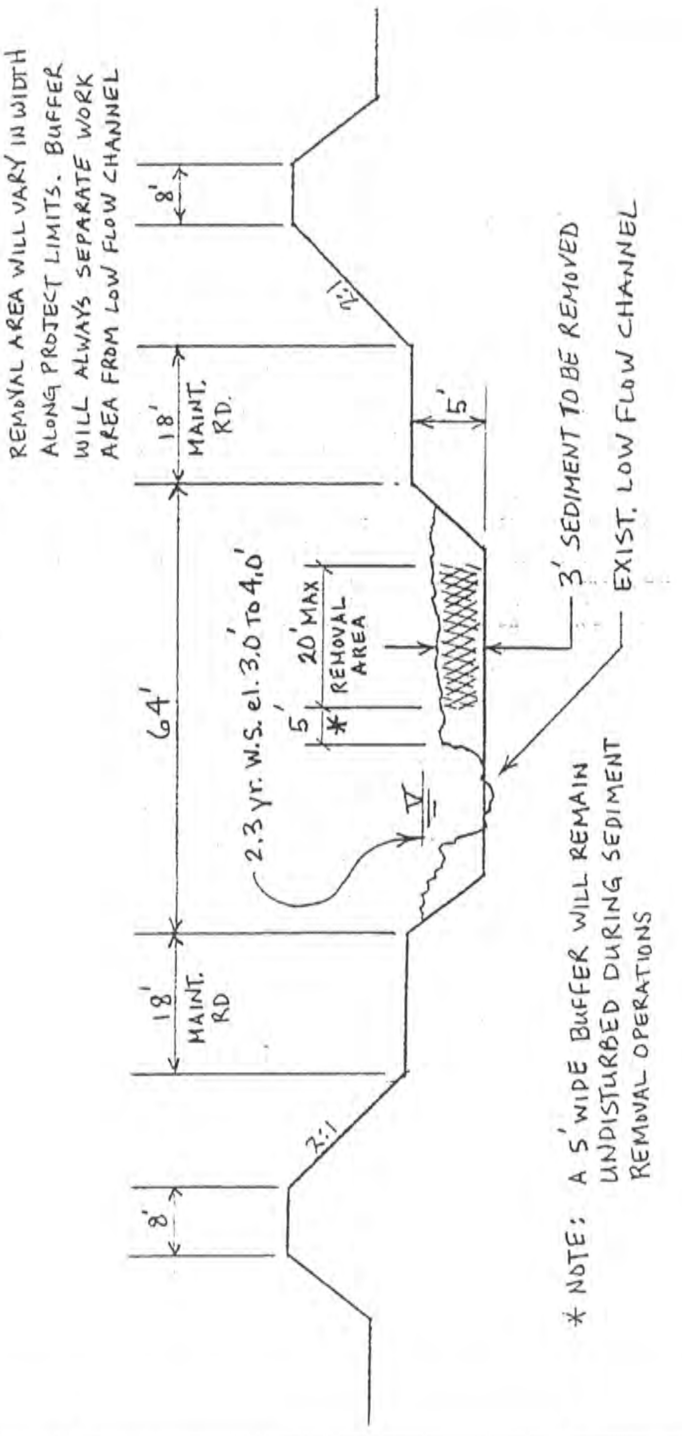
Figure A-2b-Plan View, Berryessa Creek, Milpitas Blvd. to Calaveras Blvd.



PURPOSE: To remove sediment from flood control channels to restore capacity.	**PLAN VIEW** Not to scale Santa Clara Valley Water District 5750 Almaden Expressway San Jose, California 95118 www.scvwd.dst.ca.us	*PROPOSED SEDIMENT REMOVAL IN:* Berryessa Creek *COUNTY OF:* Santa Clara *APPLICATION BY:* Santa Clara Valley Water District *DATE:* May 2001

04/27/2001 11:00 a.m.

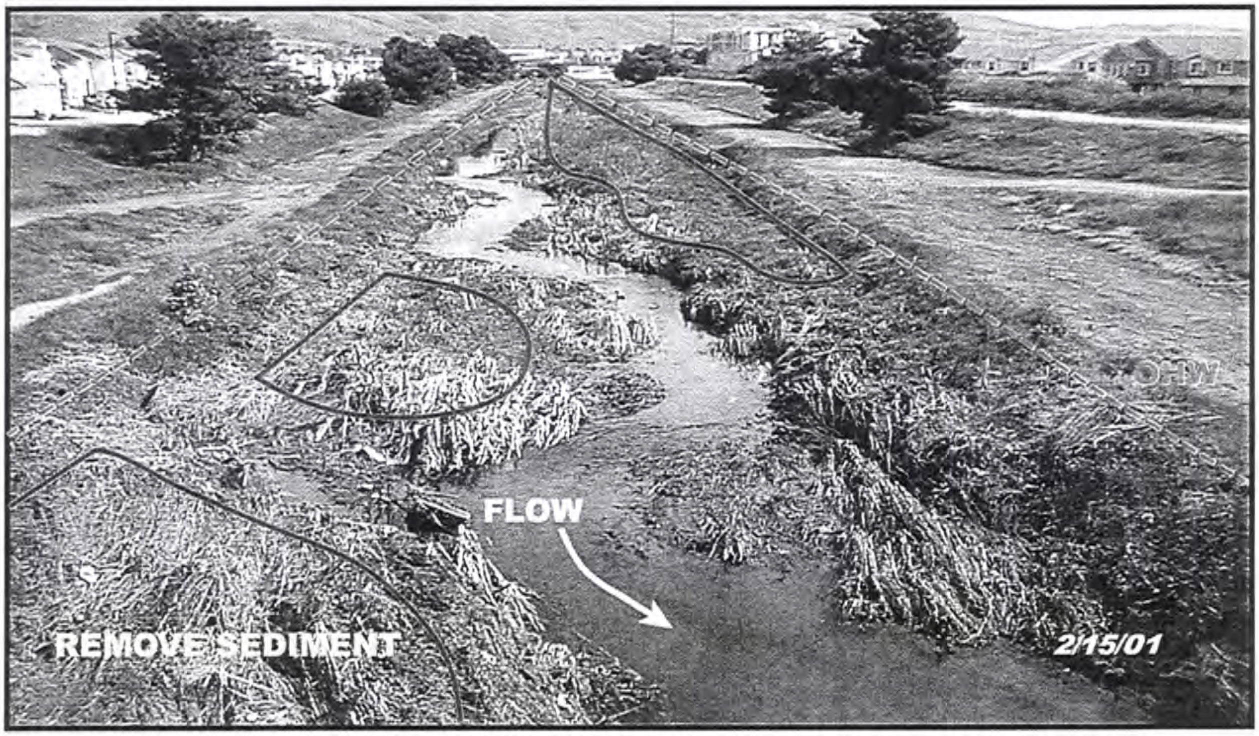
Figure A-2c-Typical Section, Berryessa Creek, Milpitas Blvd. to Calaveras Blvd.


REMOVAL AREA WILL VARY IN WIDTH ALONG PROJECT LIMITS. BUFFER WILL ALWAYS SEPARATE WORK AREA FROM LOW FLOW CHANNEL
8'
2:1
18' MAINT. RD.
5'
3' SEDIMENT TO BE REMOVED
EXIST. LOW FLOW CHANNEL
64'
2.3 yr. W.S. el. 3.0' TO 4.0'
20' MAX REMOVAL AREA
5' *
18' MAINT. RD
2:1
8'
* NOTE: A 5' WIDE BUFFER WILL REMAIN UNDISTURBED DURING SEDIMENT REMOVAL OPERATIONS

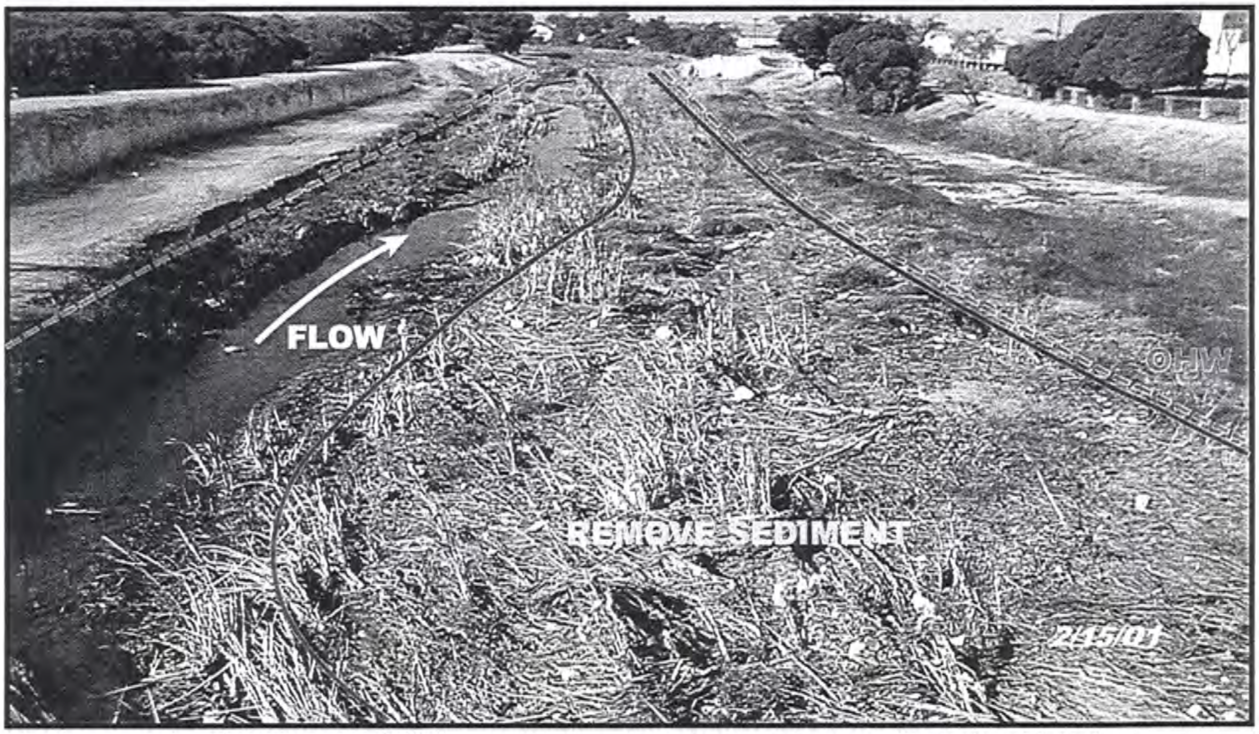
PURPOSE: To remove sediment from flood control channels to restore capacity.	**TYPICAL SECTION** Not to scale Santa Clara Valley Water District 5750 Almaden Expressway San Jose, California 95118 www.scvwd.dst.ca.us	*PROPOSED SEDIMENT REMOVAL IN:* Berryessa Creek *COUNTY OF:* Santa Clara *APPLICATION BY:* Santa Clara Valley Water District *DATE:* May 2001

04/27/2001 11:00 a.m.

Figure A-2d - Berryessa Creek - Milpitas Blvd. to Calaveras Blvd.

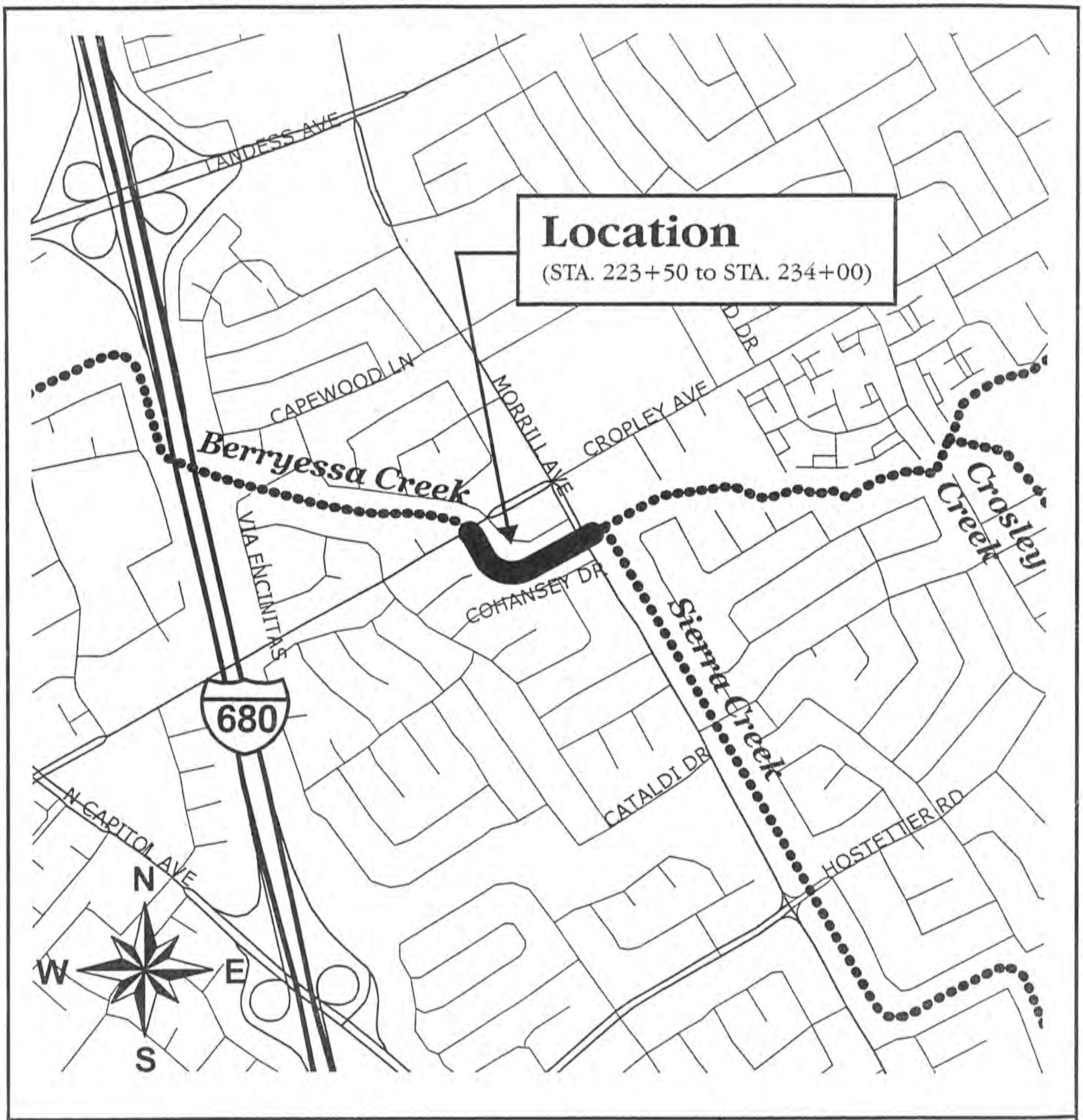


View 1 - Looking upstream from Milpitas Boulevard at sediment removal areas. *(berryessa2.jpg)*



View 2 - Looking downstream of Hillview Drive at sediment removal areas. *(Berryessa2b.jpg)*

Figure A-3a-Vicinity Map, Berryessa Creek, Cropley Ave. to Sierra Creek Confluence



PURPOSE: To remove sediment from flood control channels to restore capacity.

VICINITY MAP

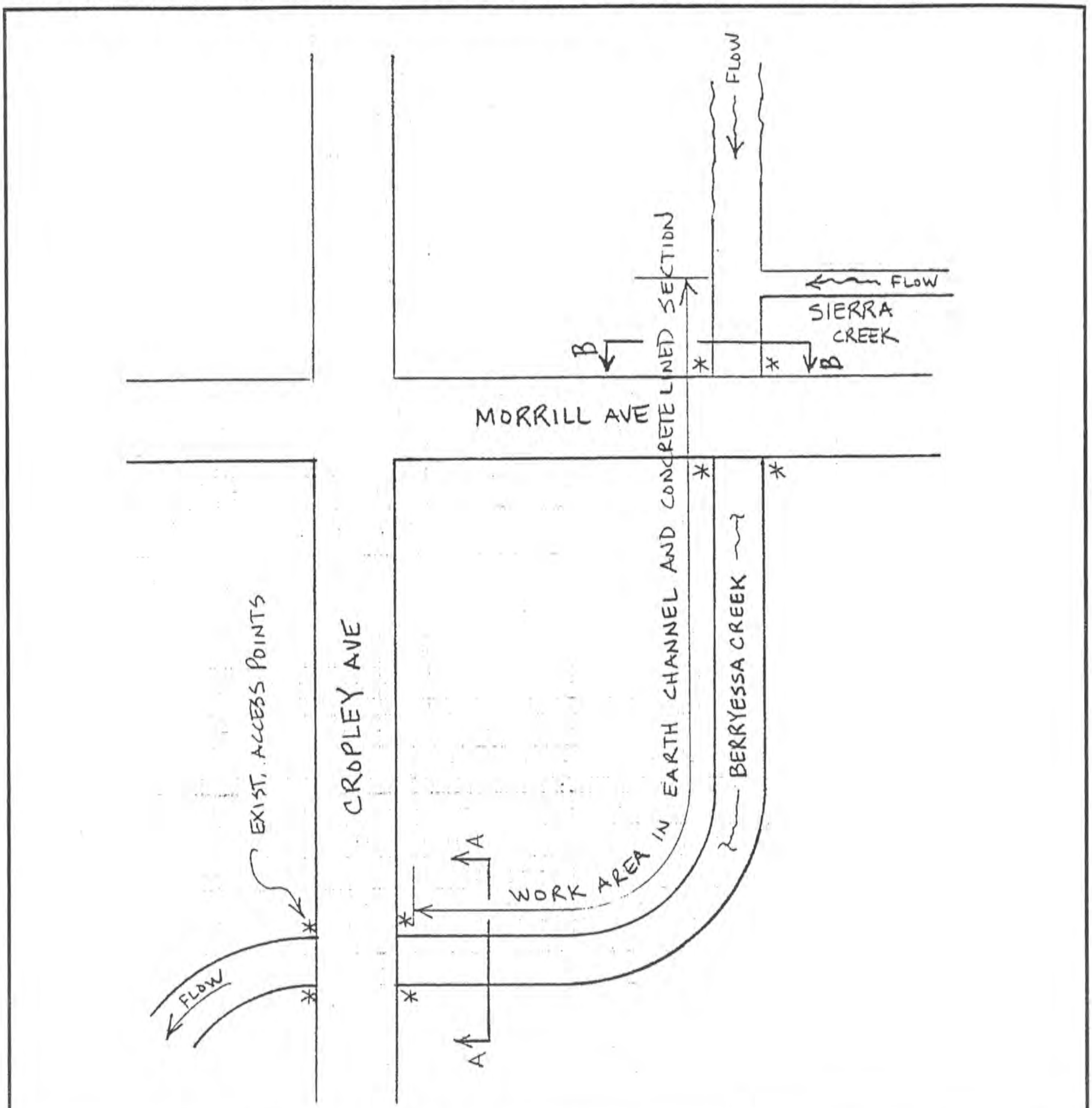
500 0 500 1000 Feet

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:
Berryessa Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure A-3b-Plan View, Berryessa Creek, Cropley Ave. to Sierra Creek Confluence



PURPOSE: To remove sediment from flood control channels to restore capacity.

PLAN VIEW

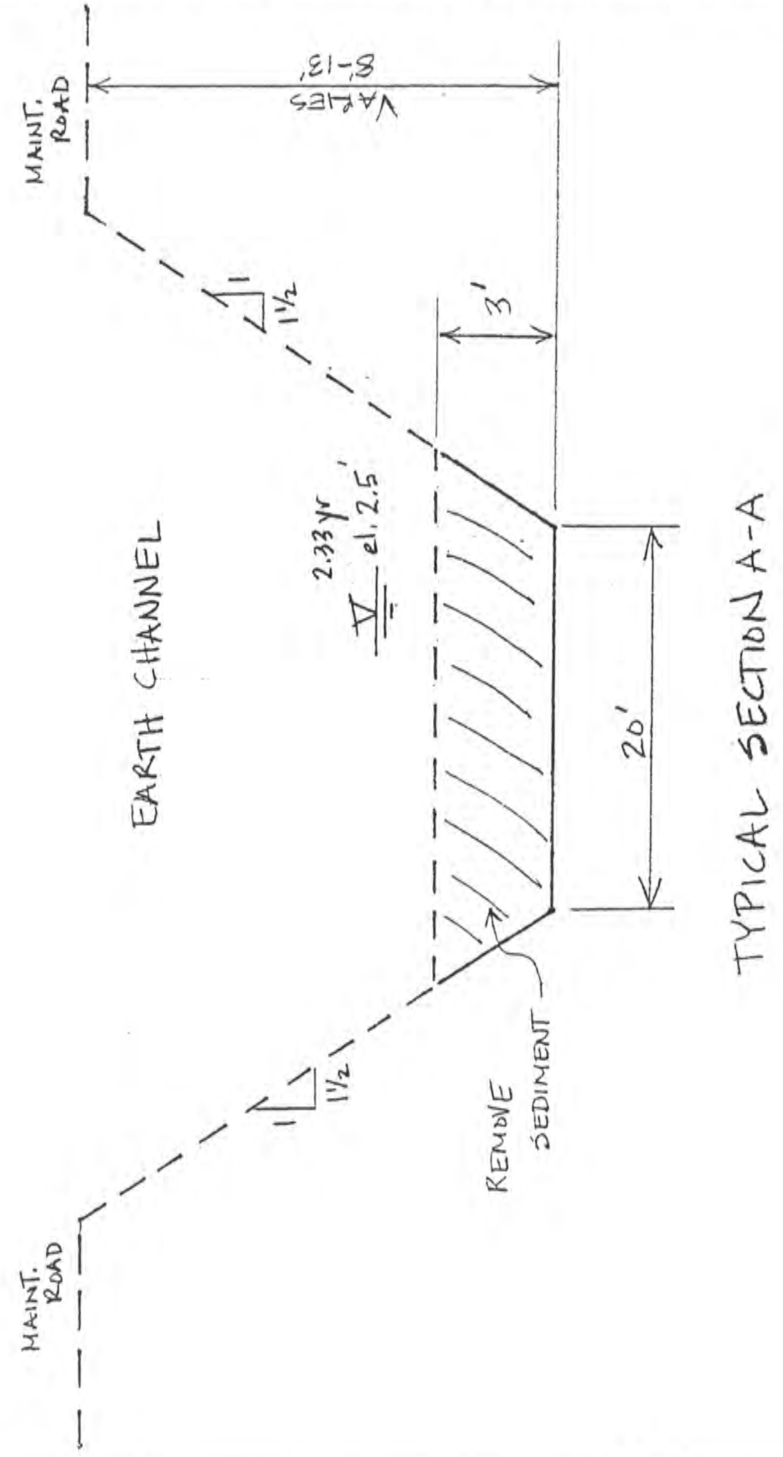
Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:
Berryessa Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure A-3c-Typical Section, Berryessa Creek, Cropley Ave. to Sierra Creek Confluence



PURPOSE: To remove sediment from flood control channels to restore capacity.

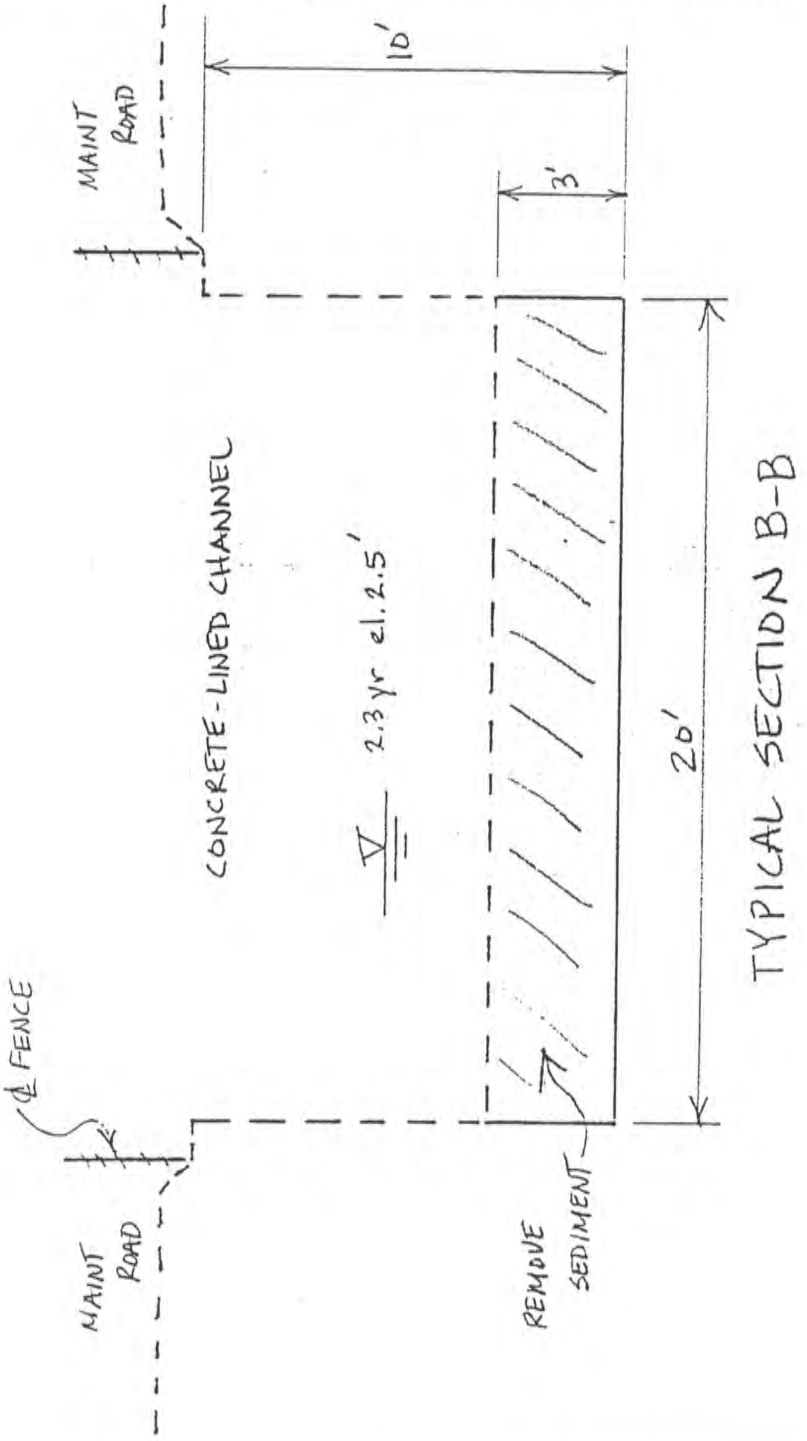
TYPICAL SECTION

Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:
Berryessa Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

Figure A-3d-Typical Section, Berryessa Creek, Cropley Ave. to Sierra Creek Confluence



PURPOSE: To remove sediment from flood control channels to restore capacity.

TYPICAL SECTION

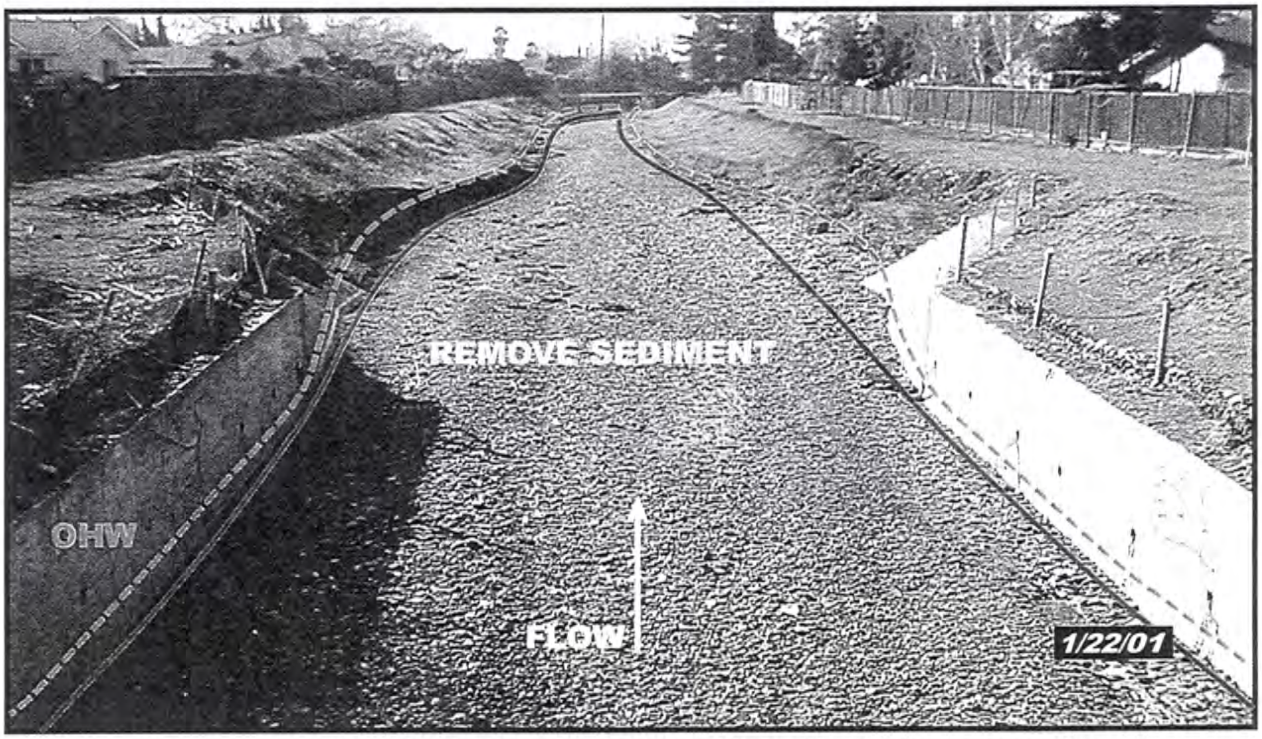
Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:
Berryessa Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

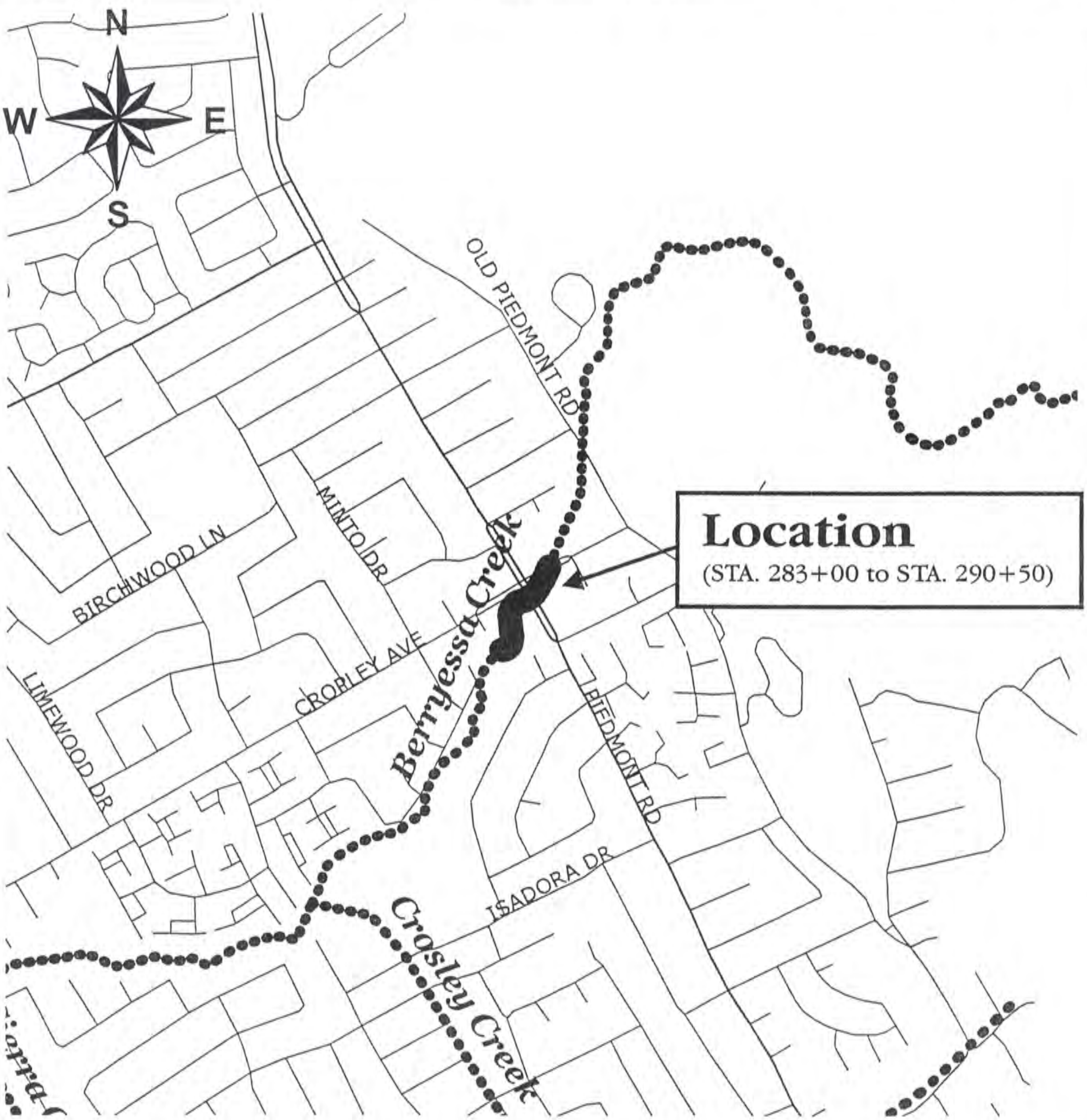
04/27/2001 11:00 a.m.

Figure A-3e - Berryessa Creek - Cropley Avenue to Sierra Creek Confluence



View 1 - Looking downstream of Morrill Avenue at sediment removal area. *(berryessa3.jpg)*

Figure A-4a-Vicinity Map, Berryessa Creek, upstream and downstream of Piedmont Rd.



PURPOSE: To remove sediment from flood control channels to restore capacity.

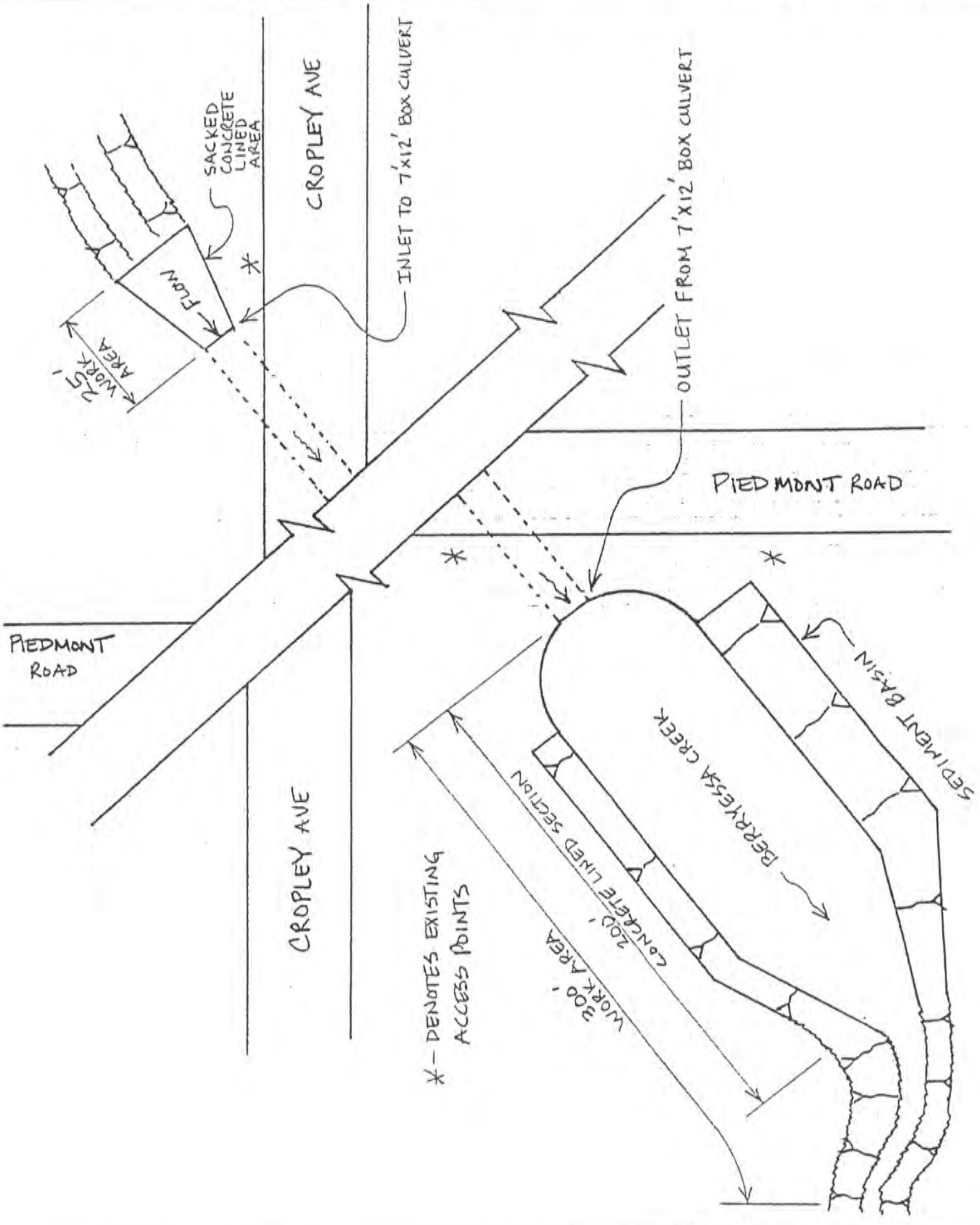
VICINITY MAP

500 0 500 1000 Feet

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:
Berryessa Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley
Water District
DATE: May 2001

Figure A-4b-Plan View, Berryessa Creek, upstream and downstream of Piedmont Rd.


SACKED CONCRETE LINED AREA
CROPLEY AVE
INLET TO 7'x12' BOX CULVERT
OUTLET FROM 7'x12' BOX CULVERT
FLOW
25' WORK AREA
PIEDMONT ROAD
PIEDMONT ROAD
CROPLEY AVE
* - DENOTES EXISTING ACCESS POINTS
300' WORK AREA
200' CONCRETE LINED SECTION
BERRYESSA CREEK
SEDIMENT BASIN

PURPOSE: To remove sediment from flood control channels to restore capacity.

PLAN VIEW

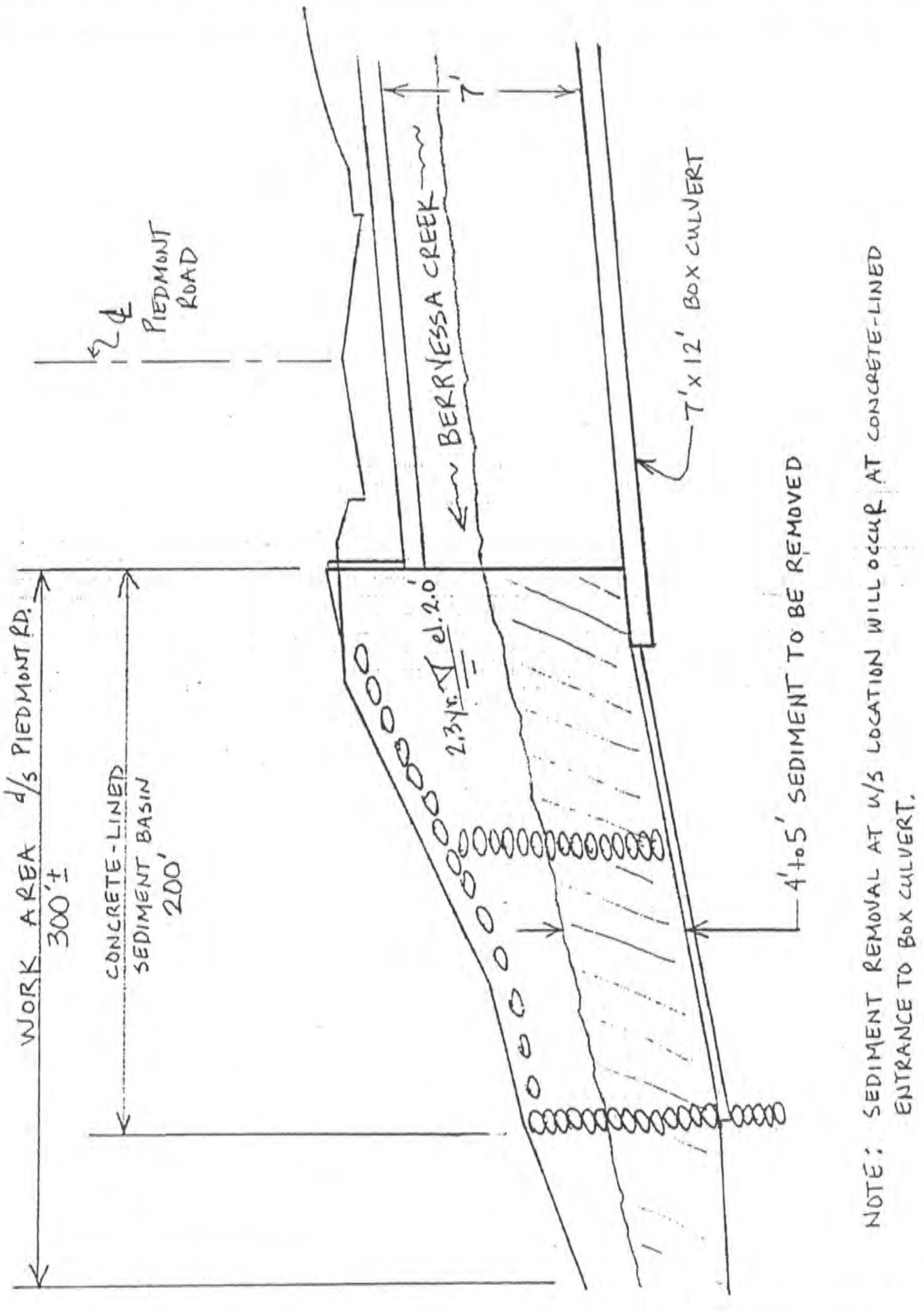
Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:
Berryessa Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure A-4c-Typical Section, Berryessa Creek, upstream and downstream of Piedmont Rd.


7'
BERRYESSA CREEK
7'x12' BOX CULVERT
℄ PIEDMONT ROAD
WORK AREA d/s PIEDMONT RD.
300'±
CONCRETE-LINED SEDIMENT BASIN
200'
2.3 yr. ∇ el. 2.0
4' to 5' SEDIMENT TO BE REMOVED

NOTE: SEDIMENT REMOVAL AT U/S LOCATION WILL OCCUR AT CONCRETE-LINED ENTRANCE TO BOX CULVERT.

PURPOSE: To remove sediment from flood control channels to restore capacity.

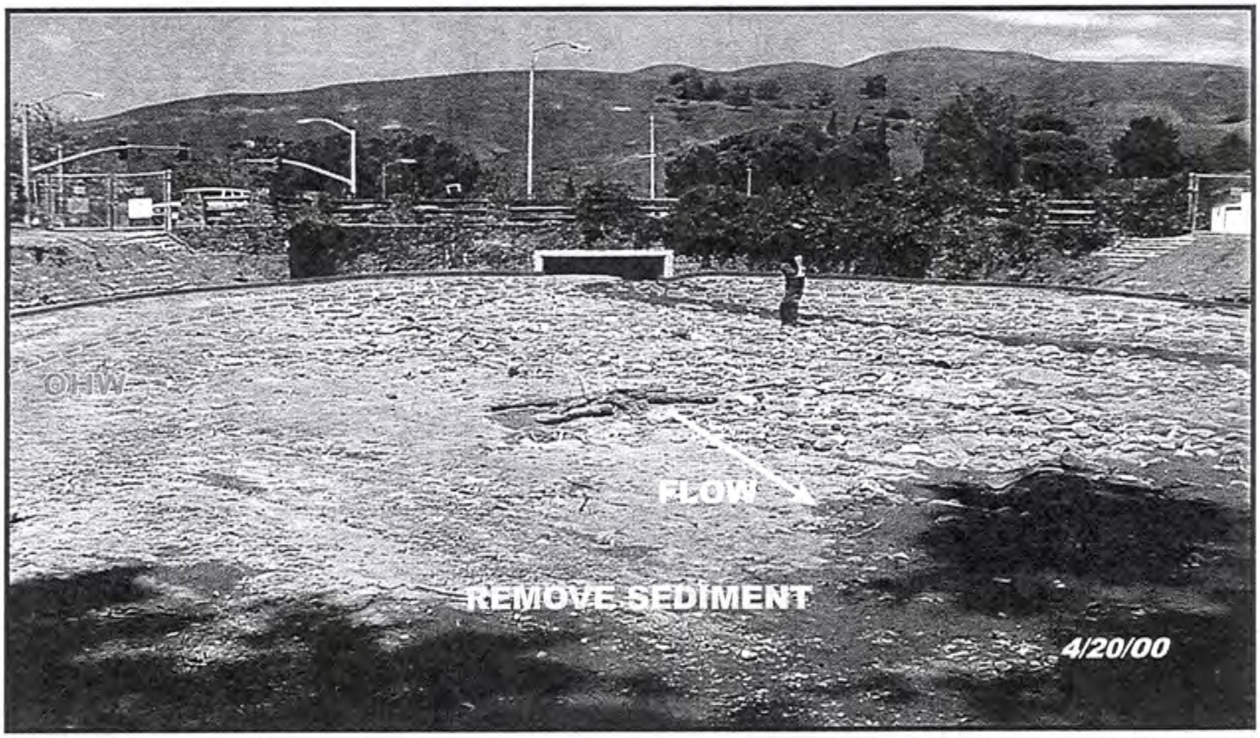
TYPICAL SECTION

Not to scale

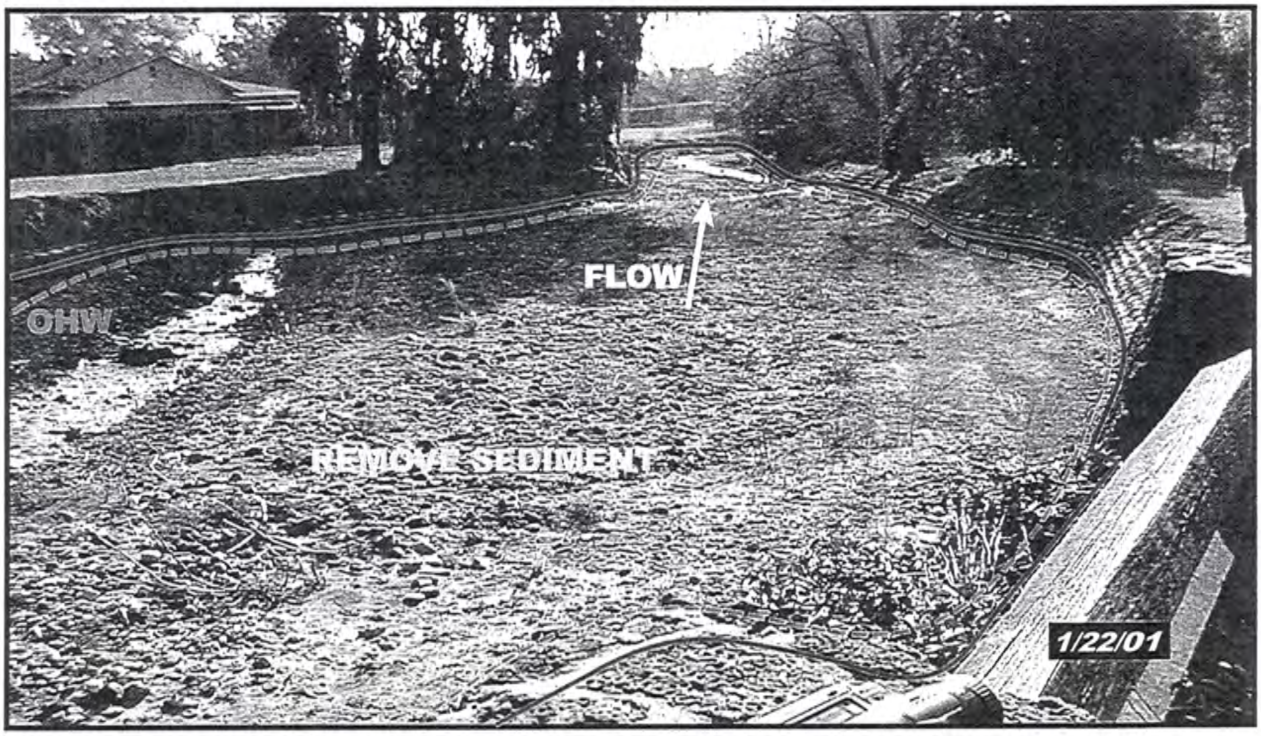
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:
Berryessa Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

Figure A-4d - Berryessa Creek - upstream of Piedmont Road

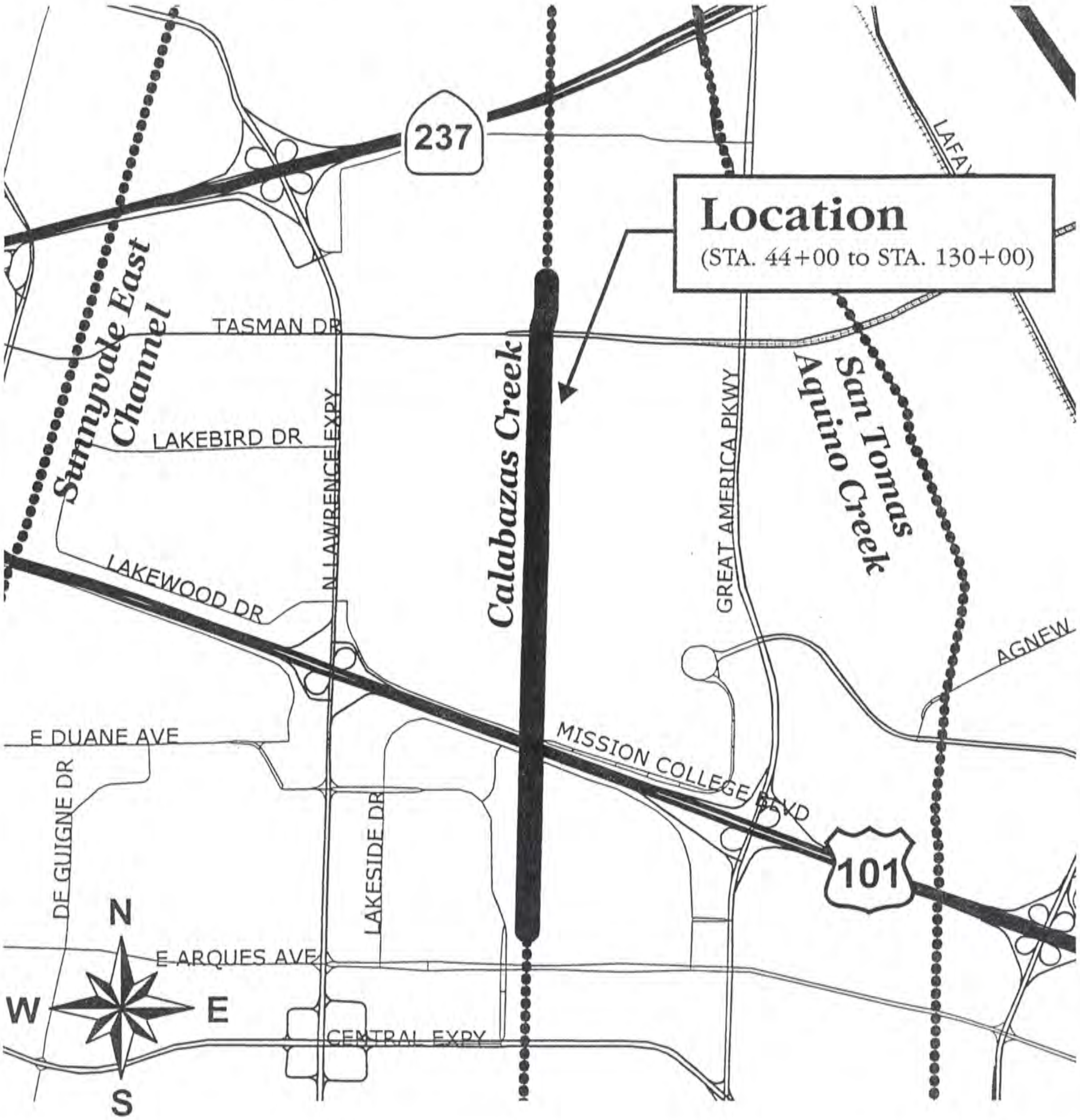


View 1 - Looking upstream towards Piedmont Road at in-stream sediment basin. *(Berryessa4.jpg)*



View 2 - Looking downstream of Piedmont Road at instream sediment basin. *(Berryessa4b.jpg)*

Figure A-5a-Vicinity Map, Calabazas Creek, downstream Highway 101



PURPOSE: To remove sediment from flood control channels to restore capacity.

VICINITY MAP

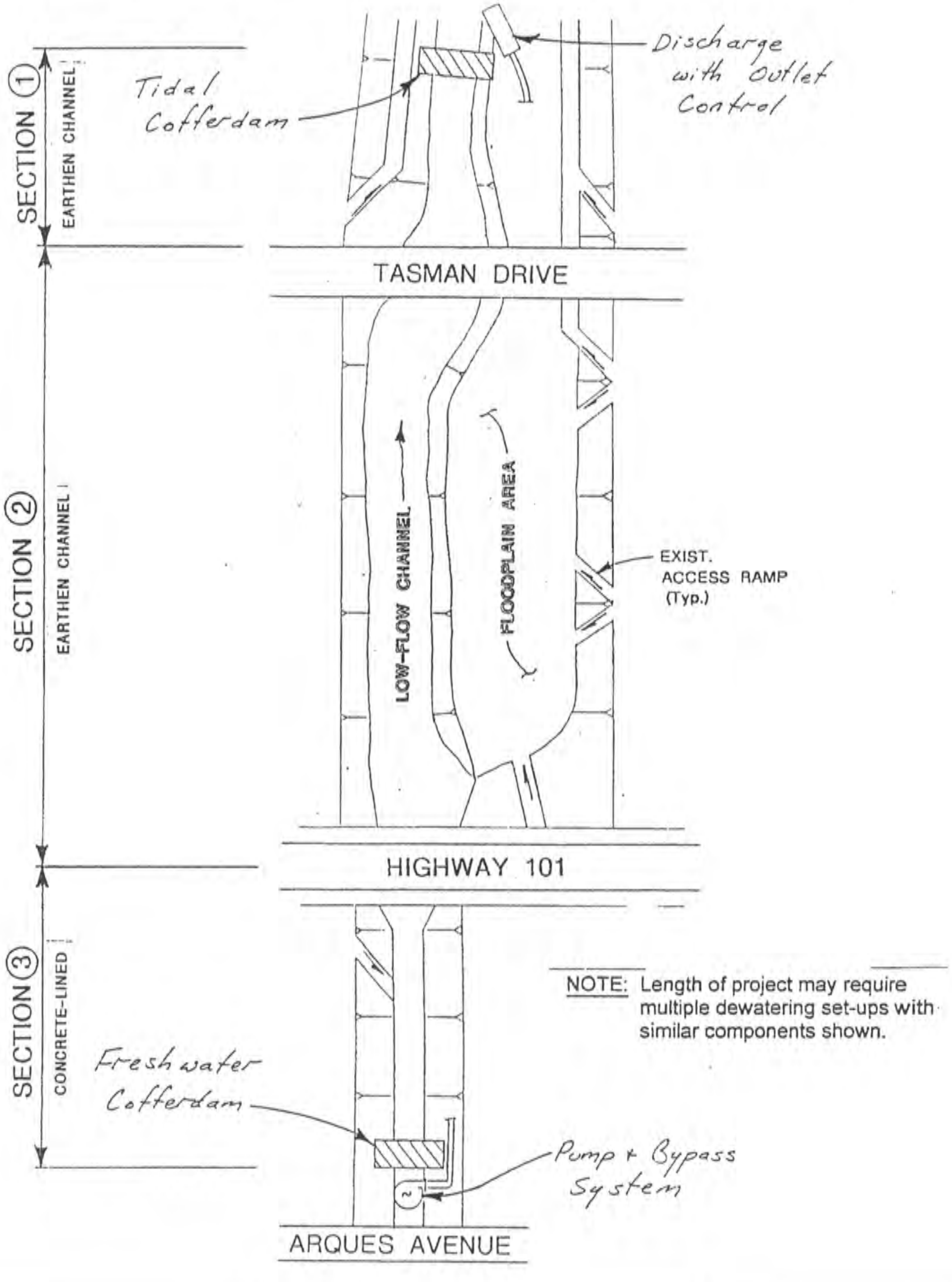
1000 0 1000 2000 Feet

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:
Calabazas Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure A-5b-Plan View, Calabazas Creek, downstream Highway 101



NOTE: Length of project may require multiple dewatering set-ups with similar components shown.

PURPOSE: To remove sediment from flood control channels to restore capacity.

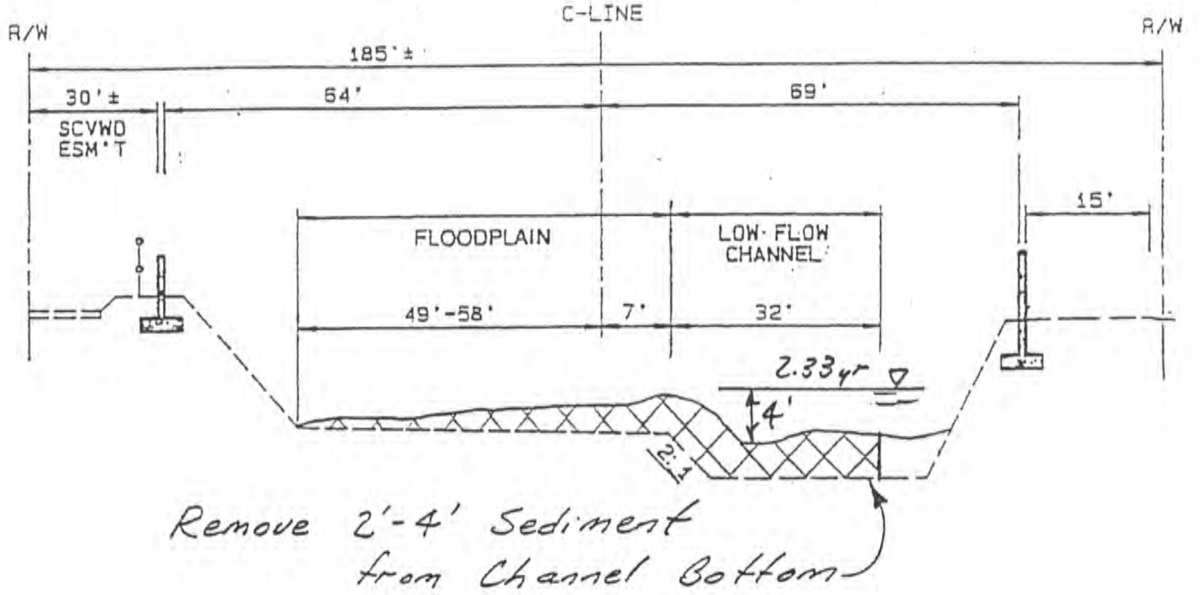
PLAN VIEW

Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:
Calabazas Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

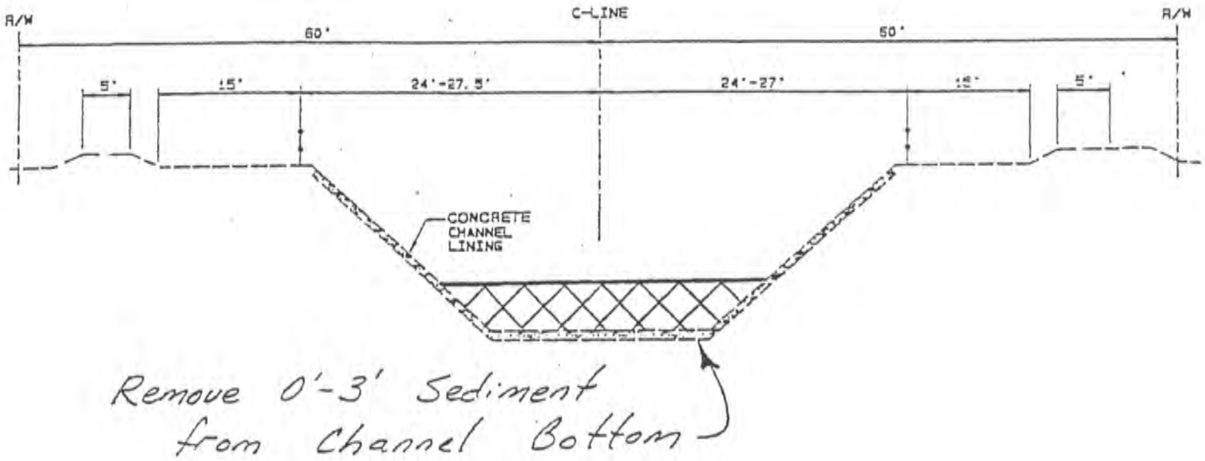
Figure A-5c-Typical Section, Calabazas Creek, downstream Highway 101



Remove 2'-4' Sediment from Channel Bottom

SECTION ① & ②

d/s Highway 101



Remove 0'-3' Sediment from Channel Bottom

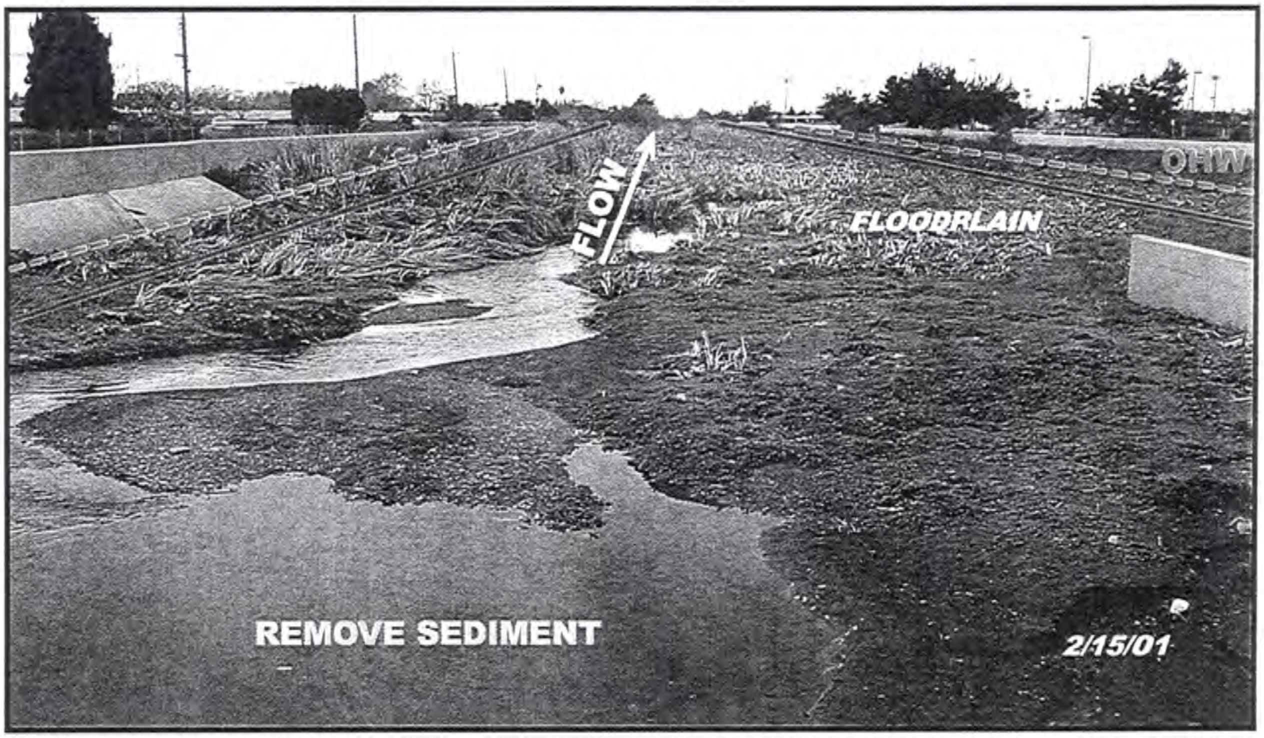
SECTION ③

u/s Highway 101

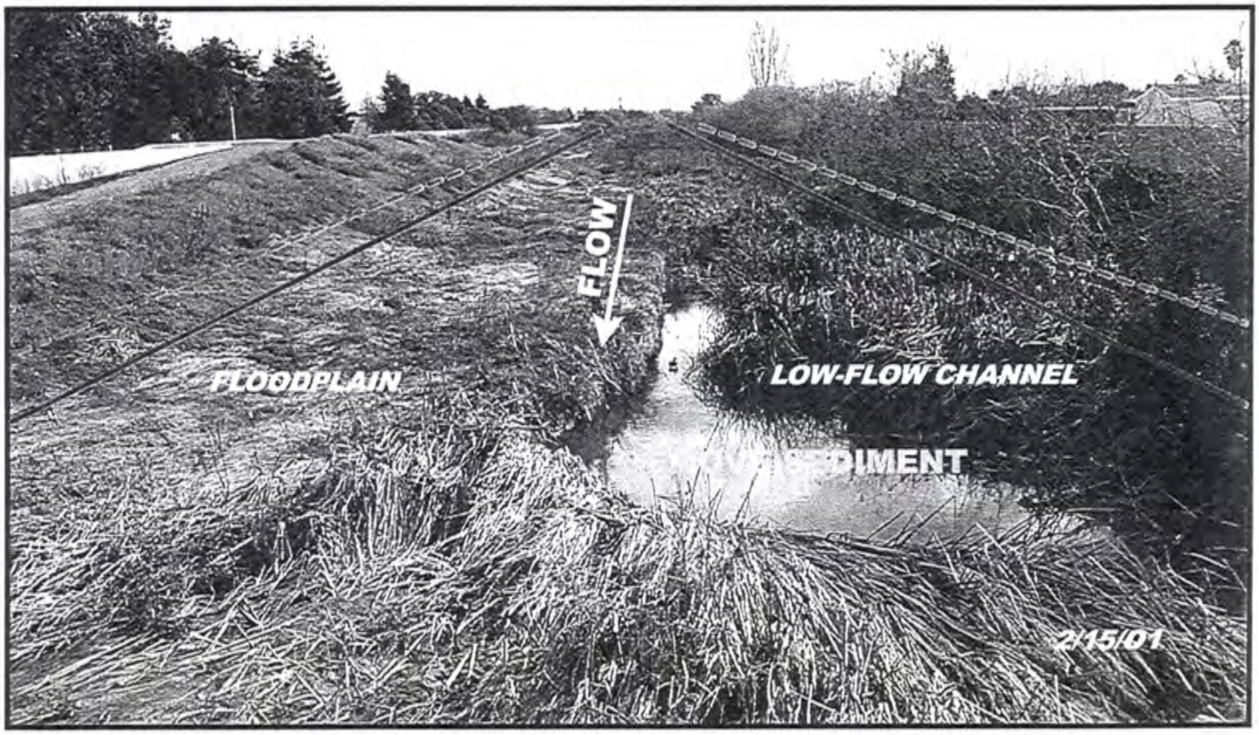
PURPOSE: To remove sediment from flood control channels to restore capacity.	**TYPICAL SECTION** Not to scale Santa Clara Valley Water District 5750 Almaden Expressway San Jose, California 95118 www.scvwd.dst.ca.us	***PROPOSED SEDIMENT REMOVAL IN:*** Calabazas Creek ***COUNTY OF:*** Santa Clara ***APPLICATION BY:*** Santa Clara Valley Water District ***DATE:*** May 2001

04/27/2001 11:00 a.m.

Figure A-5d - Calabazas Creek downstream Highway 101

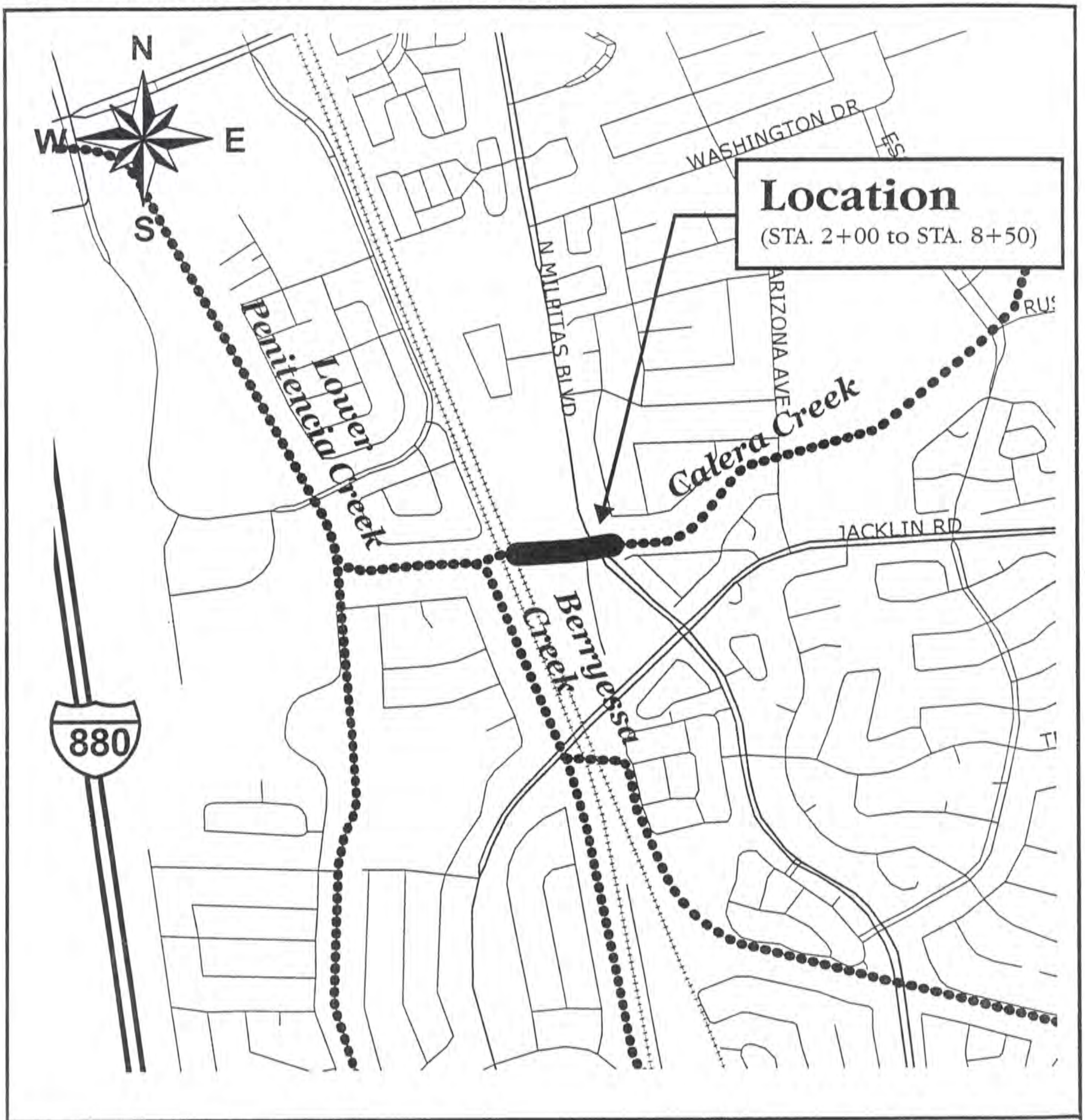


View 1 - Looking downstream from Highway 101. Project includes removal of approximately 30,000 cubic yards of sediment from earthen channel. Channel includes 32-foot wide low-flow channel and wide floodplain area. *(Calabazas ds 101, View 1 (Site5).jpg)*



View 2 - Looking upstream from Tasman Drive. *(Calabazas ds 101, View 2 (Site5).jpg)*

Figure A-6a-Vicinity Map, Calera Creek, upstream of UPRR



PURPOSE: To remove sediment from flood control channels to restore capacity.

VICINITY MAP

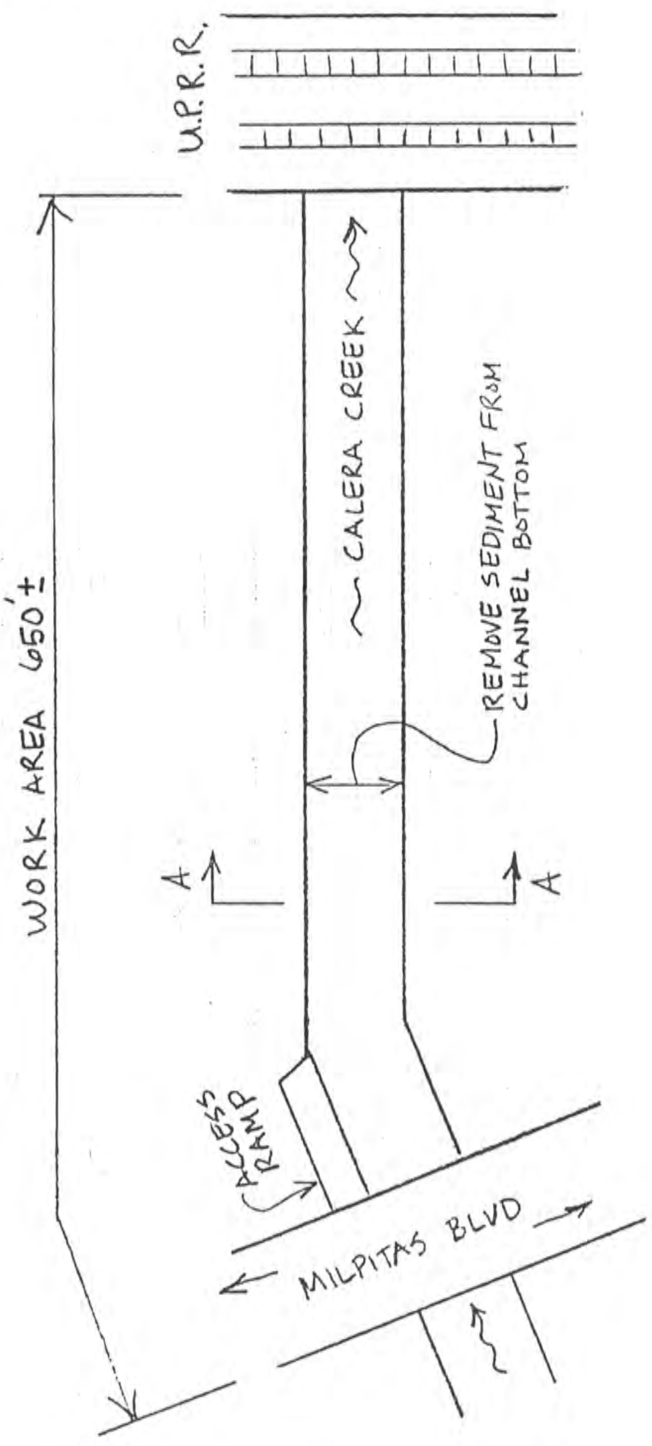
500 0 500 1000 Feet

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:
Calera Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure A-6b-Plan View, Calera Creek, upstream of UPRR



PURPOSE: To remove sediment from flood control channels to restore capacity.

PLAN VIEW

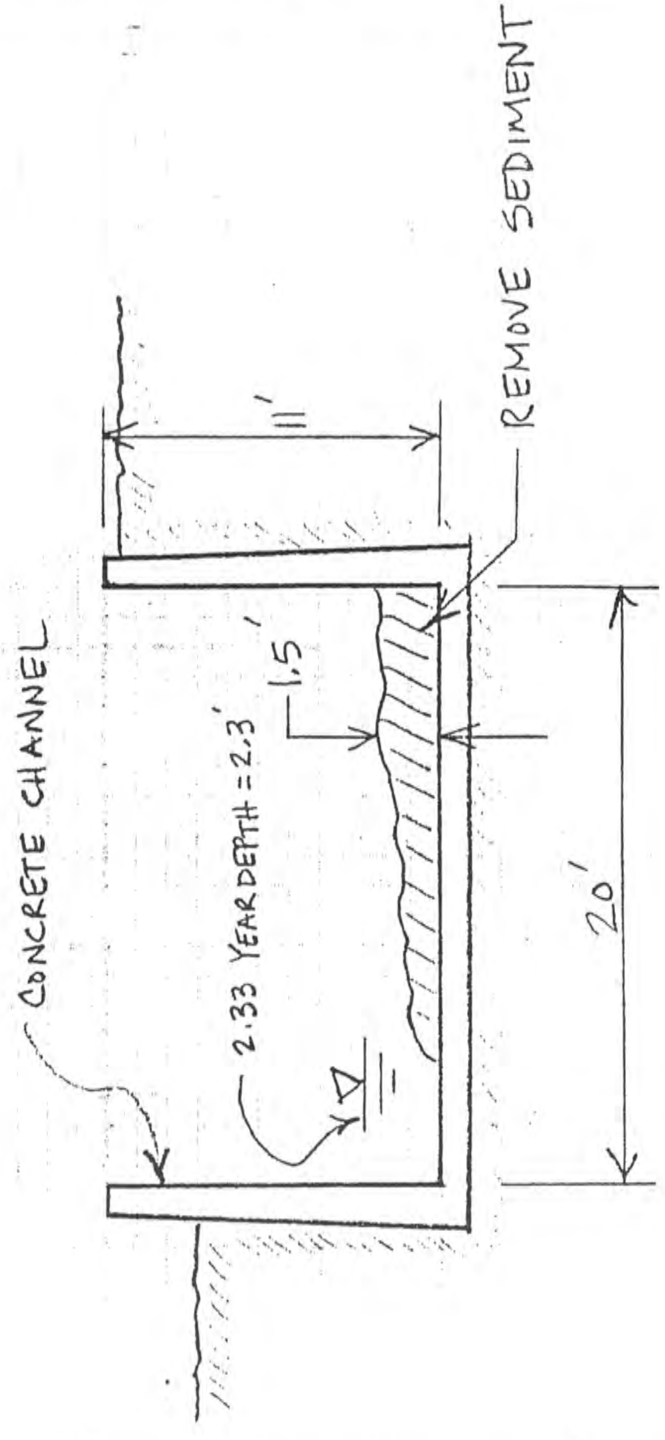
Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:
Calera Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

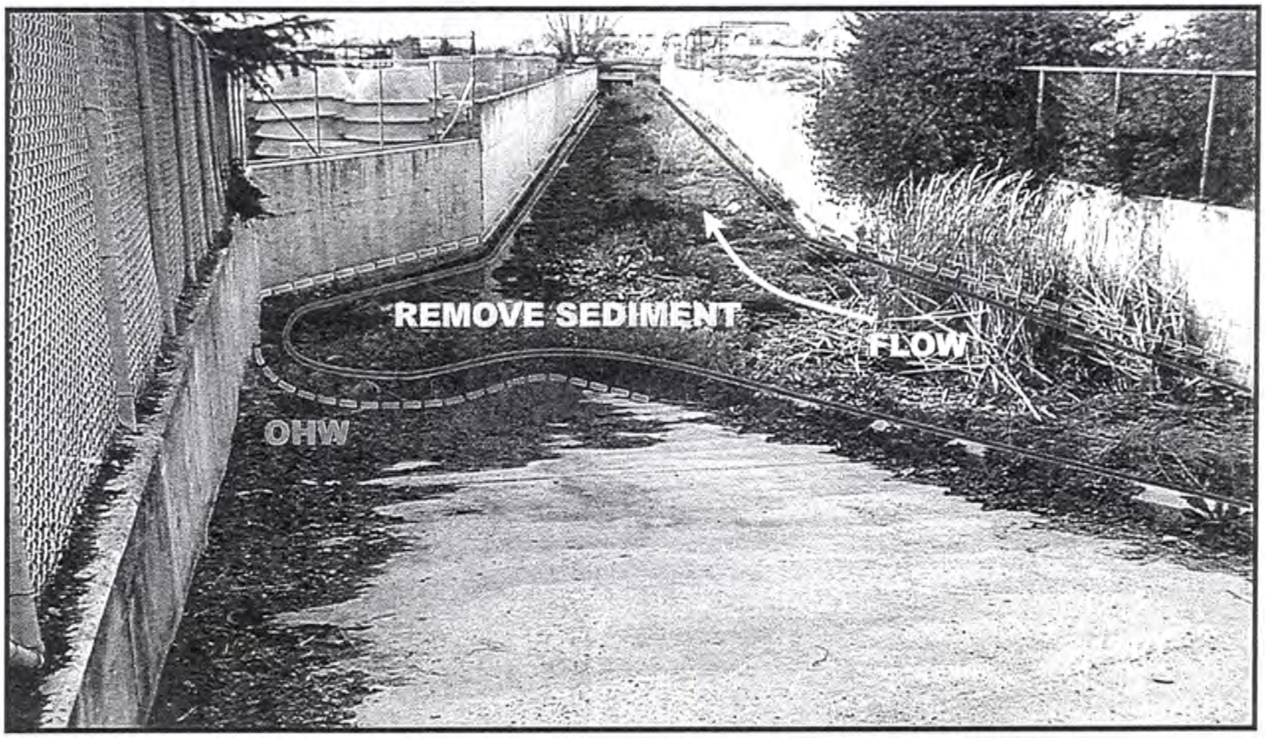
Figure A-6c-Typical Section, Calera Creek, upstream of UPRR



PURPOSE: To remove sediment from flood control channels to restore capacity.	**TYPICAL SECTION** Not to scale Santa Clara Valley Water District 5750 Almaden Expressway San Jose, California 95118 www.scvwd.dst.ca.us	***PROPOSED SEDIMENT REMOVAL IN:*** Calera Creek ***COUNTY OF:*** Santa Clara ***APPLICATION BY:*** Santa Clara Valley Water District ***DATE:*** May 2001

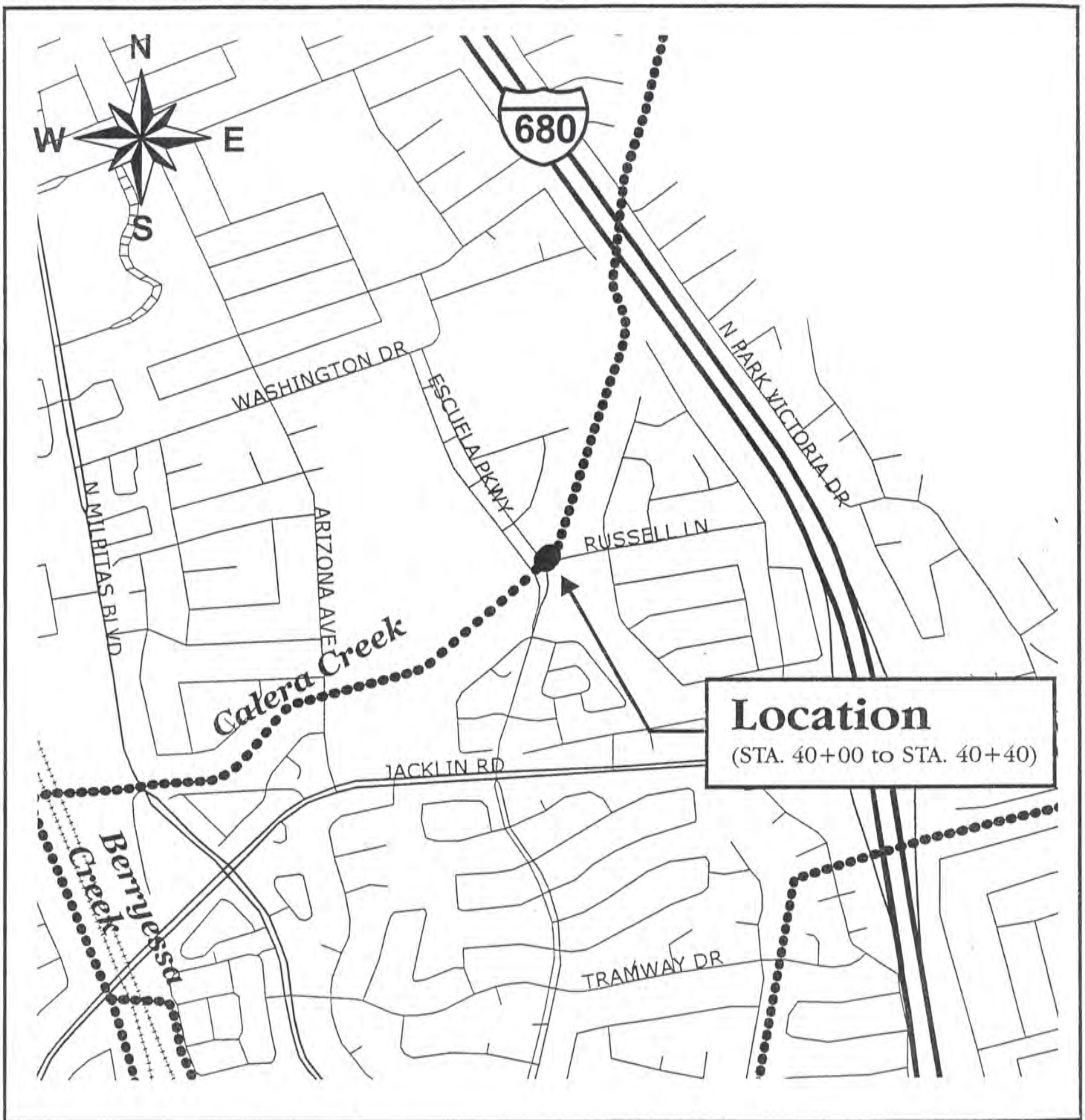
04/27/2001 11:00 a.m.

Figure A-6d - Calera Creek, upstream of UPRR



View 1 - Looking downstream of Milpitas Boulevard at sediment removal area. *(Calera 6.jpg)*

Figure A-7a-Vicinity Map, Calera Creek, upstream of Escuela Pkwy.



PURPOSE: To remove sediment from flood control channels to restore capacity.

VICINITY MAP

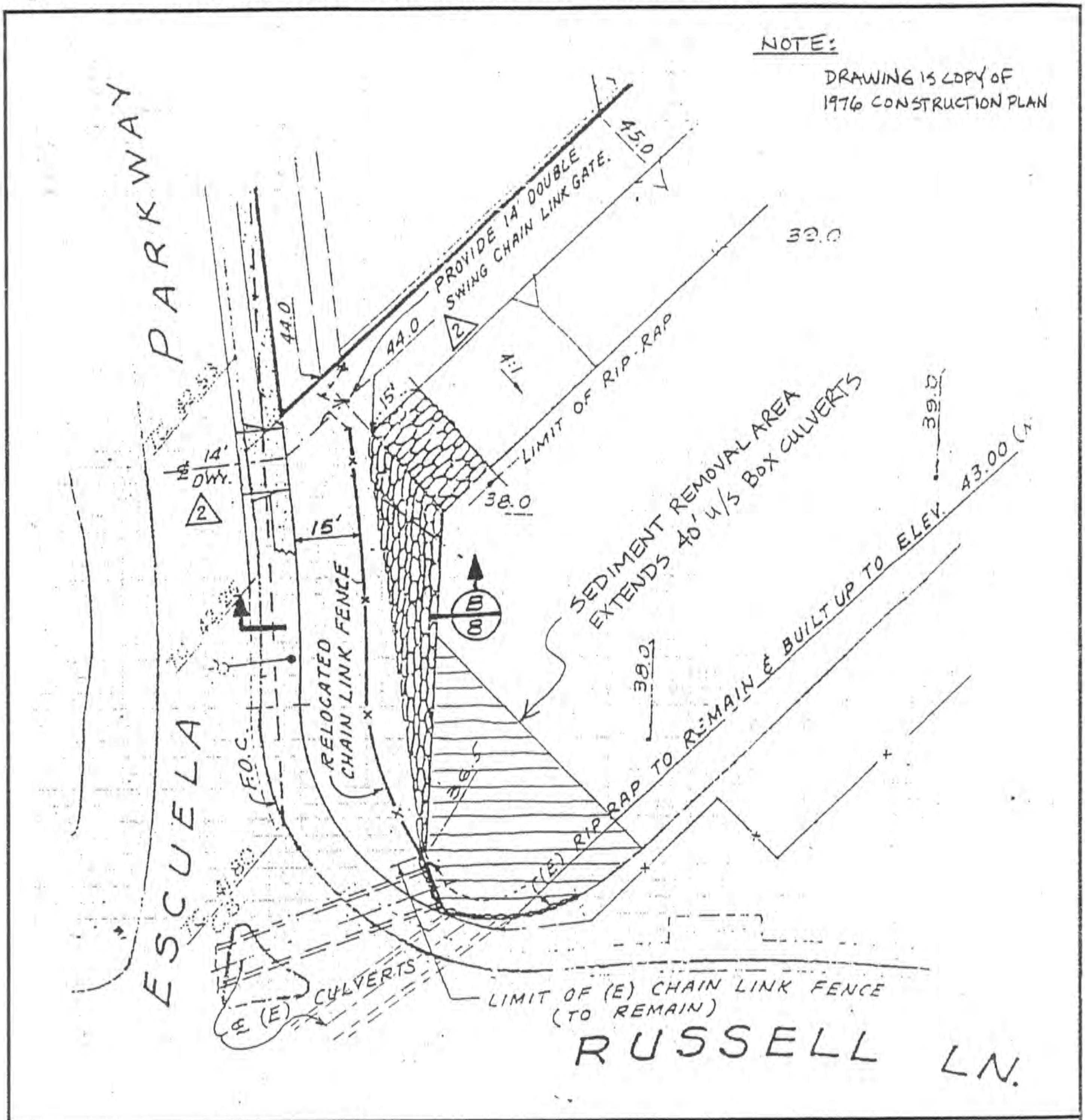
500 0 500 1000 Feet

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:
Calera Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley
Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure A-7b-Plan View, Calera Creek, upstream of Escuela Pkwy.

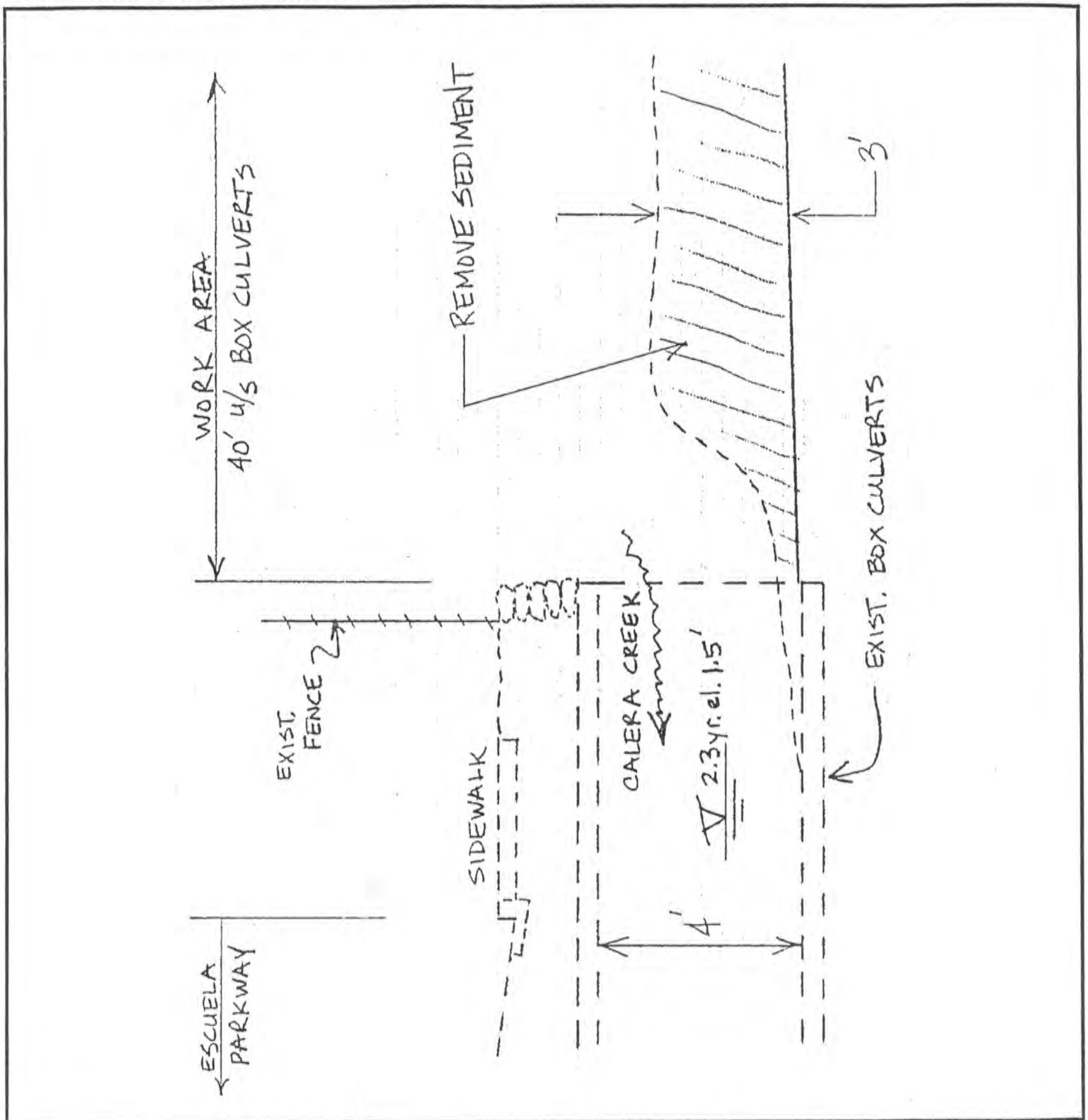

NOTE:
DRAWING IS COPY OF 1976 CONSTRUCTION PLAN

ESCUELA PARKWAY
PROVIDE 14' DOUBLE SWING CHAIN LINK GATE.
45.0
39.0
44.0
44.0
2
15'
14' DWY.
2
15'
LIMIT OF RIP-RAP
4:1
38.0
SEDIMENT REMOVAL AREA EXTENDS 40' u/s BOX CULVERTS
39.0
43.00
38.0
RELOCATED CHAIN LINK FENCE
B
8
36.5
(E) RIP RAP TO REMAIN & BUILT UP TO ELEV. 43.00
E.O.C.
(E) CULVERTS
LIMIT OF (E) CHAIN LINK FENCE (TO REMAIN)
RUSSELL LN.

PURPOSE: To remove sediment from flood control channels to restore capacity.	**PLAN VIEW** Not to scale Santa Clara Valley Water District 5750 Almaden Expressway San Jose, California 95118 www.scvwd.dst.ca.us	***PROPOSED SEDIMENT REMOVAL IN:*** Calera Creek ***COUNTY OF:*** Santa Clara ***APPLICATION BY:*** Santa Clara Valley Water District ***DATE:*** May 2001

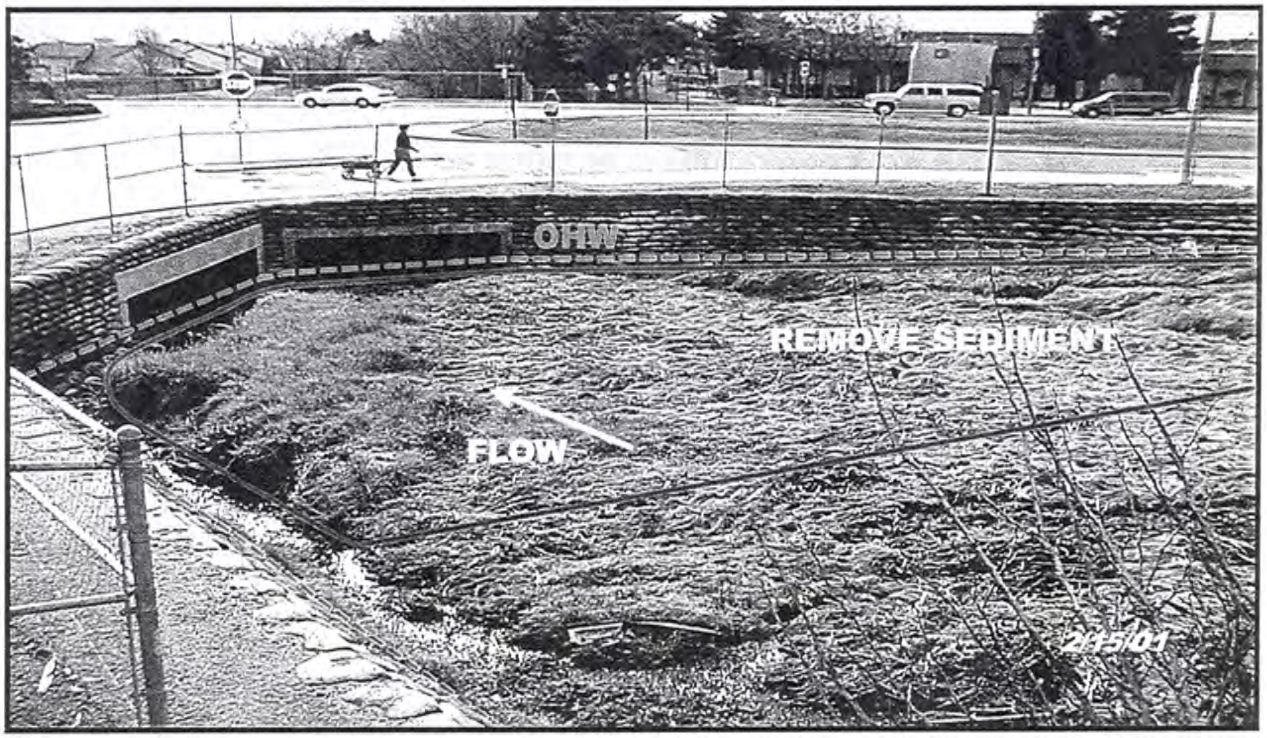
04/27/2001 11:00 a.m.

Figure A-7c-Typical Section, Calera Creek, upstream of Escuela Pkwy.



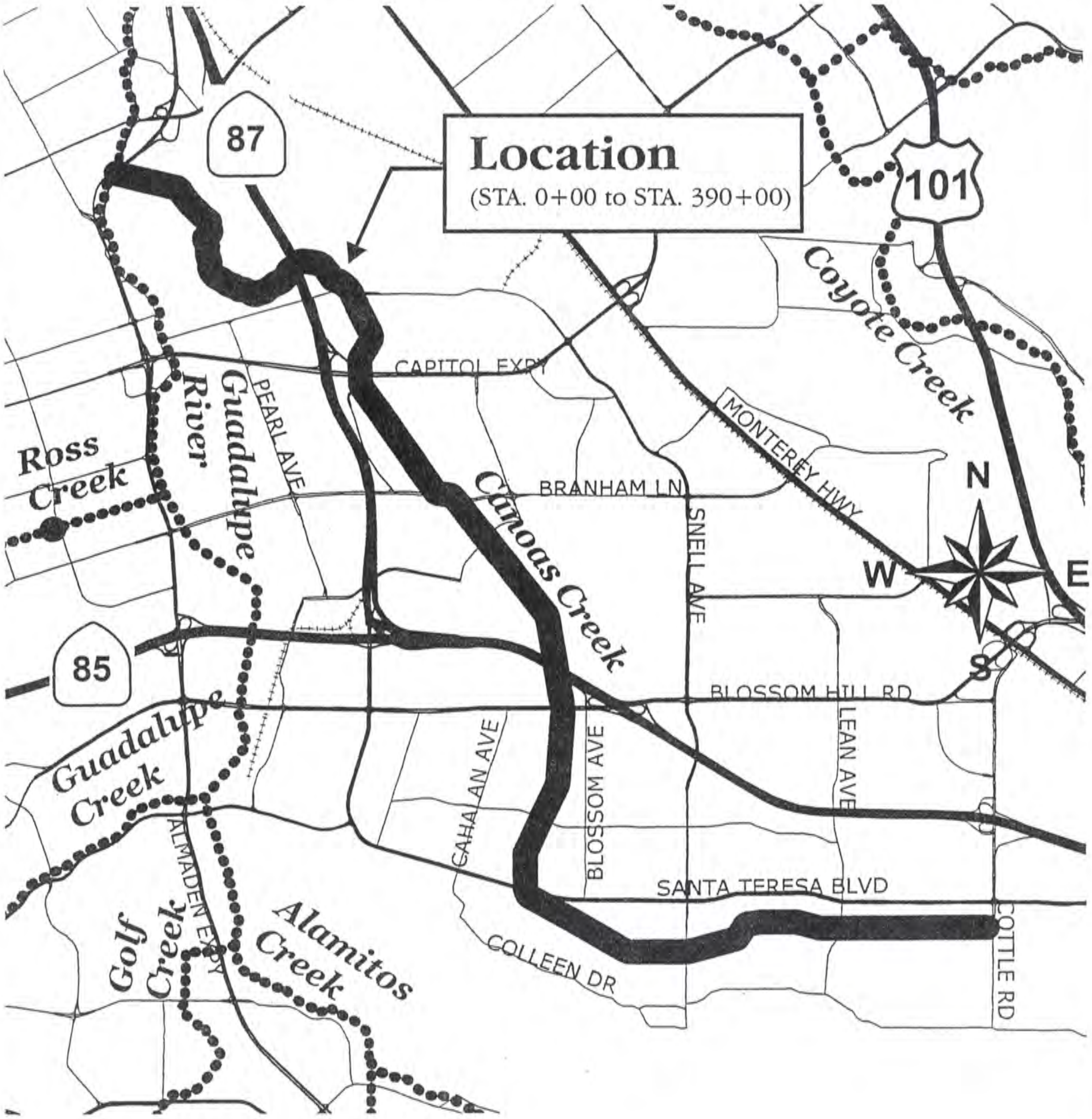
PURPOSE: To remove sediment from flood control channels to restore capacity.	**TYPICAL SECTION** Not to scale Santa Clara Valley Water District 5750 Almaden Expressway San Jose, California 95118 www.scvwd.dst.ca.us	*PROPOSED SEDIMENT REMOVAL IN:* Calera Creek *COUNTY OF:* Santa Clara *APPLICATION BY:* Santa Clara Valley Water District *DATE:* May 2001

Figure A-7d - Calera Creek - upstream of Escuela Parkway.



View 1 - Looking downstream towards Escuela Parkway at sediment removal area. *(Calera7.jpg)*

Figure A-8a-Vicinity Map, Canoas Creek, Guadalupe River Confluence to Cottle Rd.



PURPOSE: To remove sediment from flood control channels to restore capacity.

VICINITY MAP

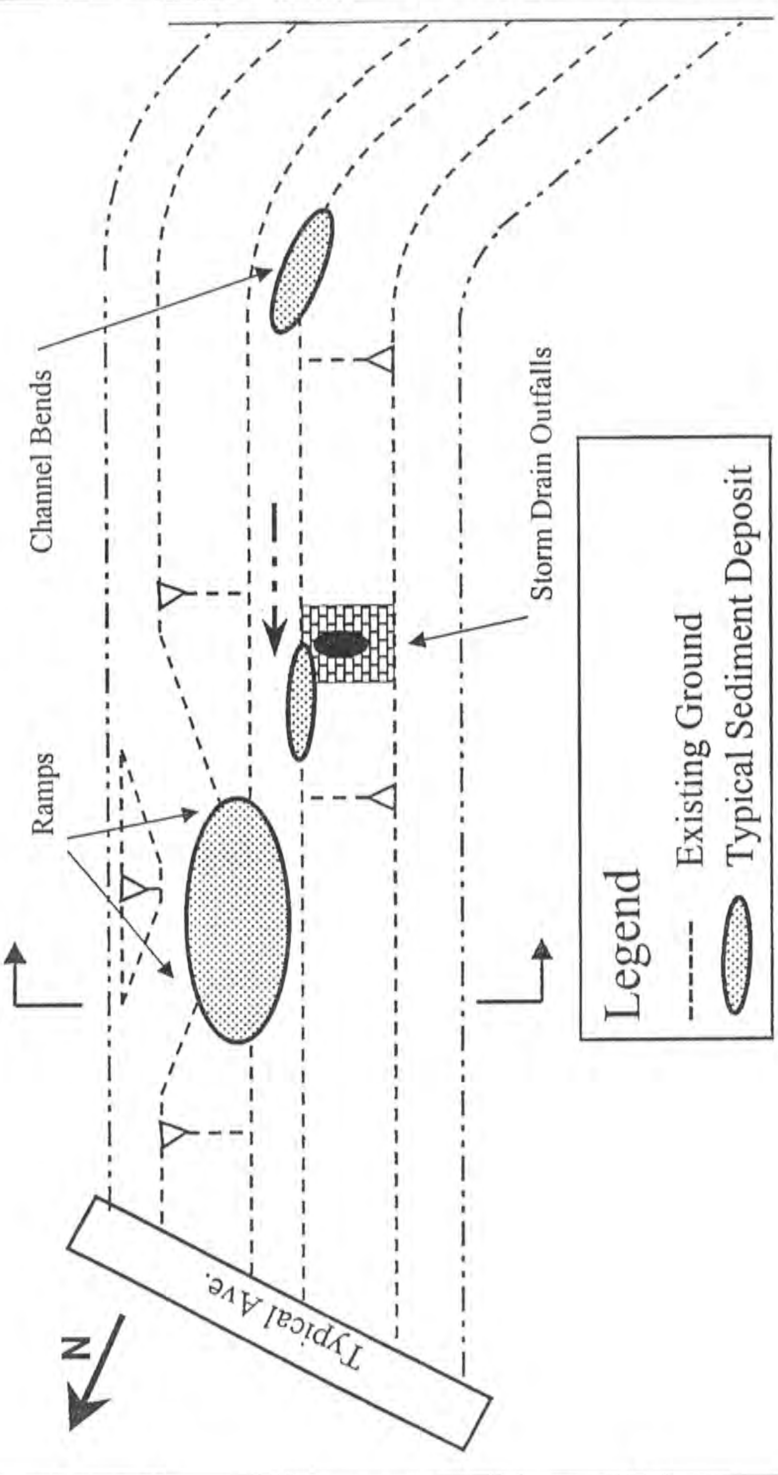
2000 0 2000 4000 Feet

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:
Canoas Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

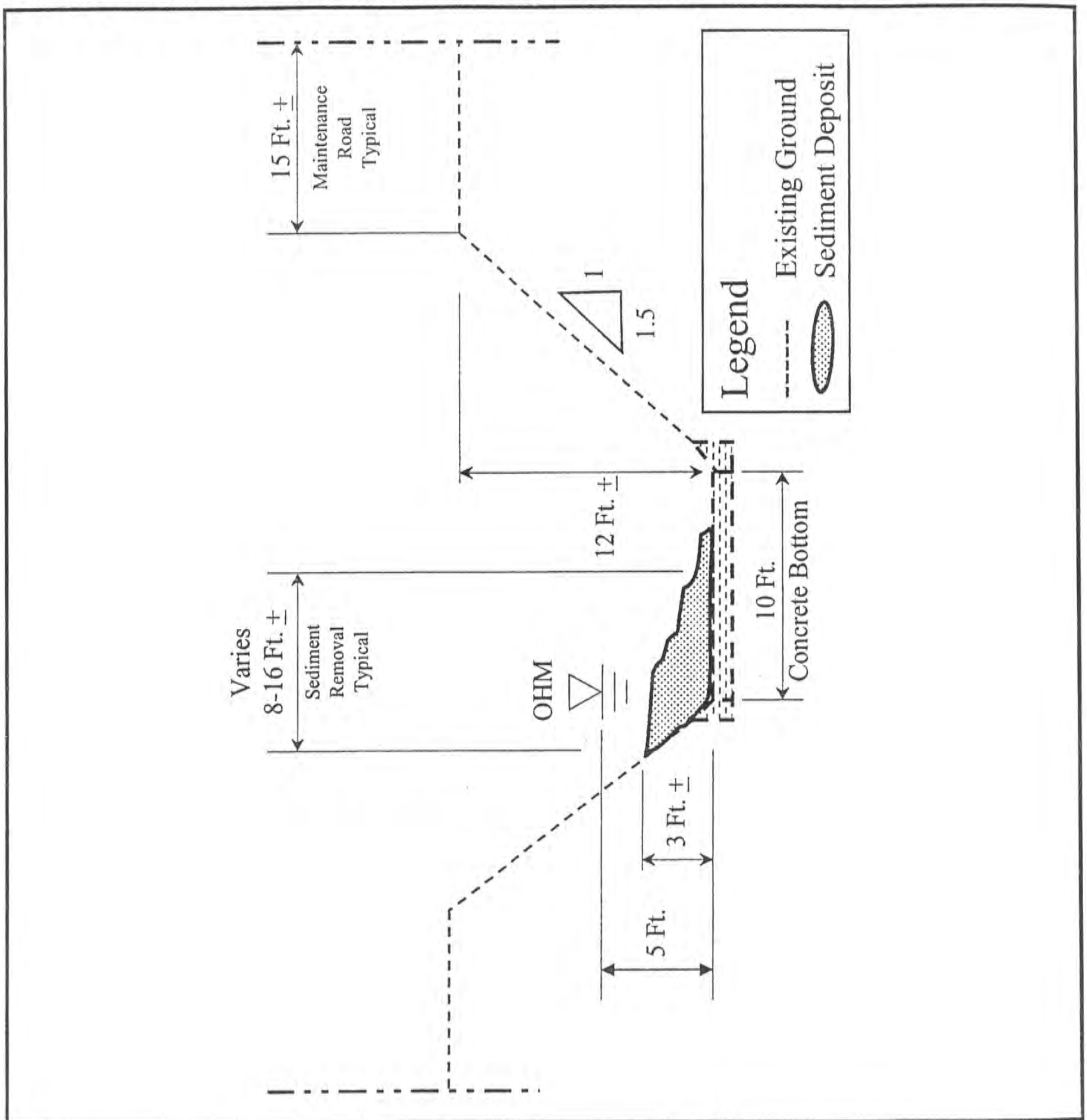
04/27/2001 11:00 a.m.

Figure A-8b-Plan View, Canoas Creek, Guadalupe River Confluence to Cottle Rd.



PURPOSE: To remove sediment from flood control channels to restore capacity.	**PLAN VIEW** Not to scale Santa Clara Valley Water District 5750 Almaden Expressway San Jose, California 95118 www.scvwd.dst.ca.us	***PROPOSED SEDIMENT REMOVAL IN:*** Canoas Creek ***COUNTY OF:*** Santa Clara ***APPLICATION BY:*** Santa Clara Valley Water District ***DATE:*** May 2001

Figure A-8c-Typical Section, Canoas Creek, Guadalupe River Confluence to Cottle Rd.



PURPOSE: To remove sediment from flood control channels to restore capacity.

TYPICAL SECTION

Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:
Canoas Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

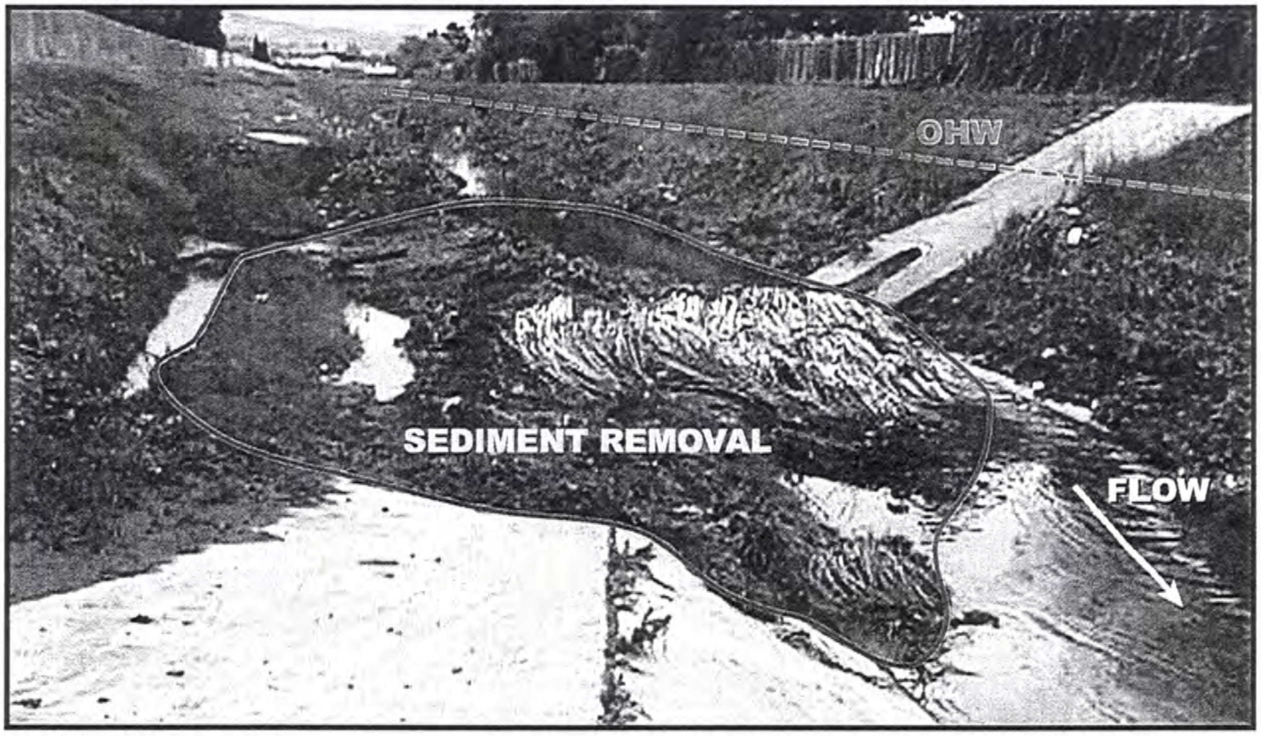
For Map, Plan, Typical Cross Section and Photos

of

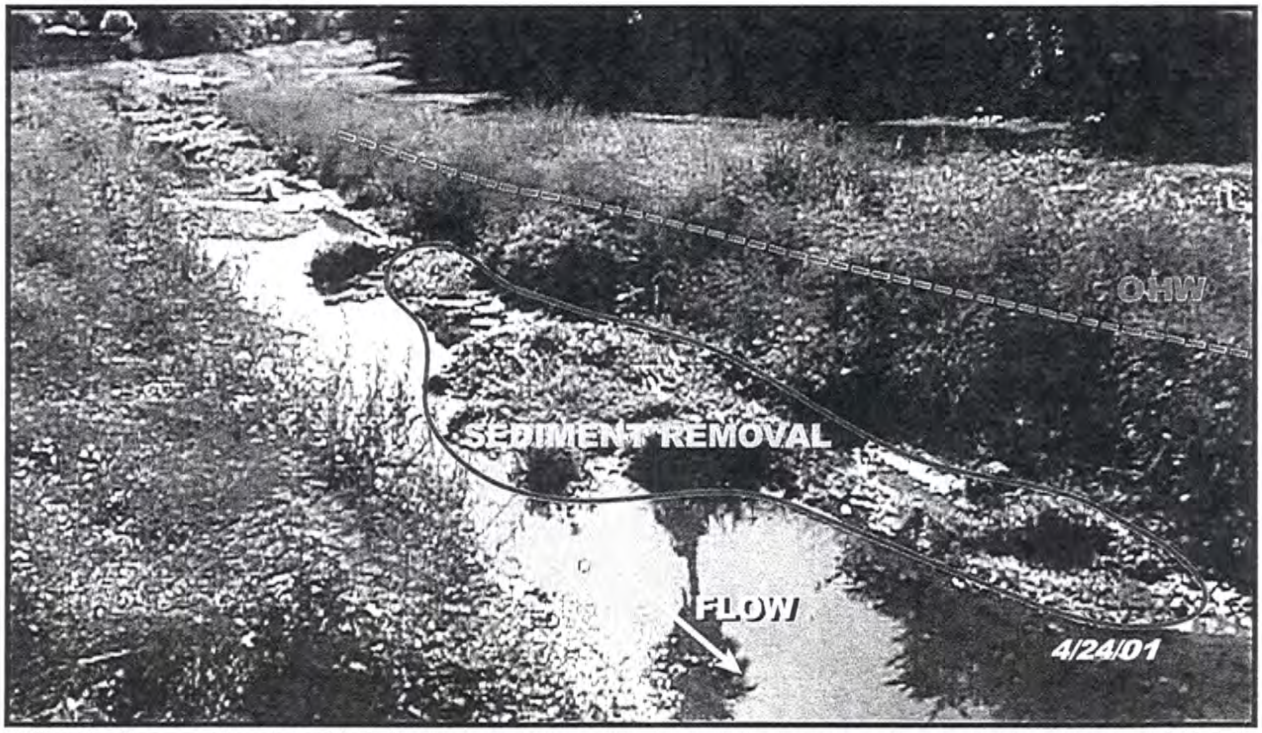
Project #9 Coyote u/s of Lower Penitencia Confluence

Please refer to Appendix B, pages B-13 – B-16

Figure A-8d - Canoas Creek - Guadalupe River confluence to Cottle Road.

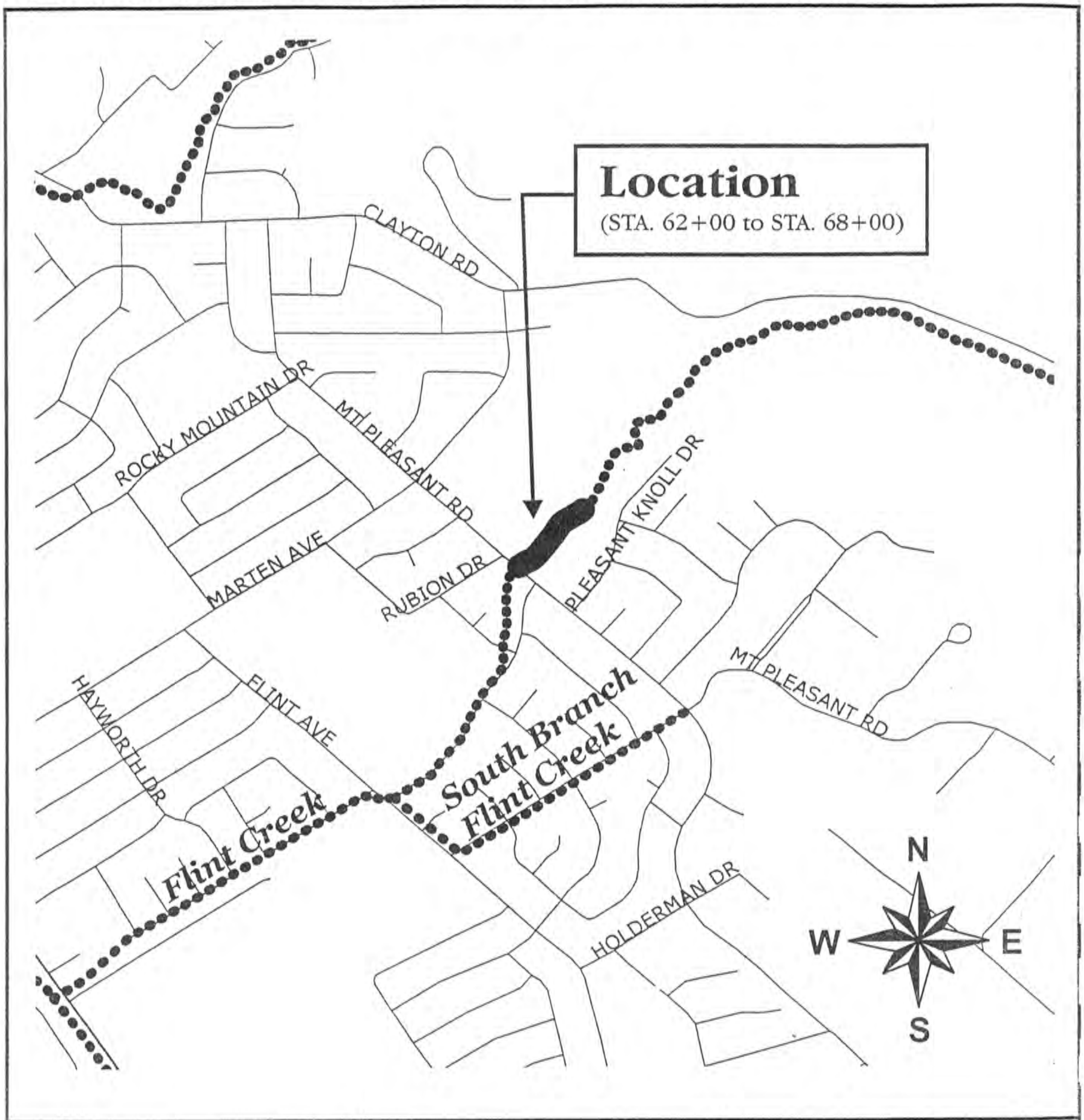


View 1 - Canoas Creek looking upstream of Snell Avenue: typical sediment removal locations at outfalls and ramps. *(Canoas sed Rem u-s Snell 2.jpg)*



View 2 - Canoas Creek looking upstream of Dunn Avenue: typical sediment removal locations at channel bends *(Canoas sediment Removal us dunn Ave.jpg)*

Figure A-10a-Vicinity Map, Flint Debris Basin, upstream of Mt. Pleasant Rd.



PURPOSE: To remove sediment to restore capacity.

VICINITY MAP

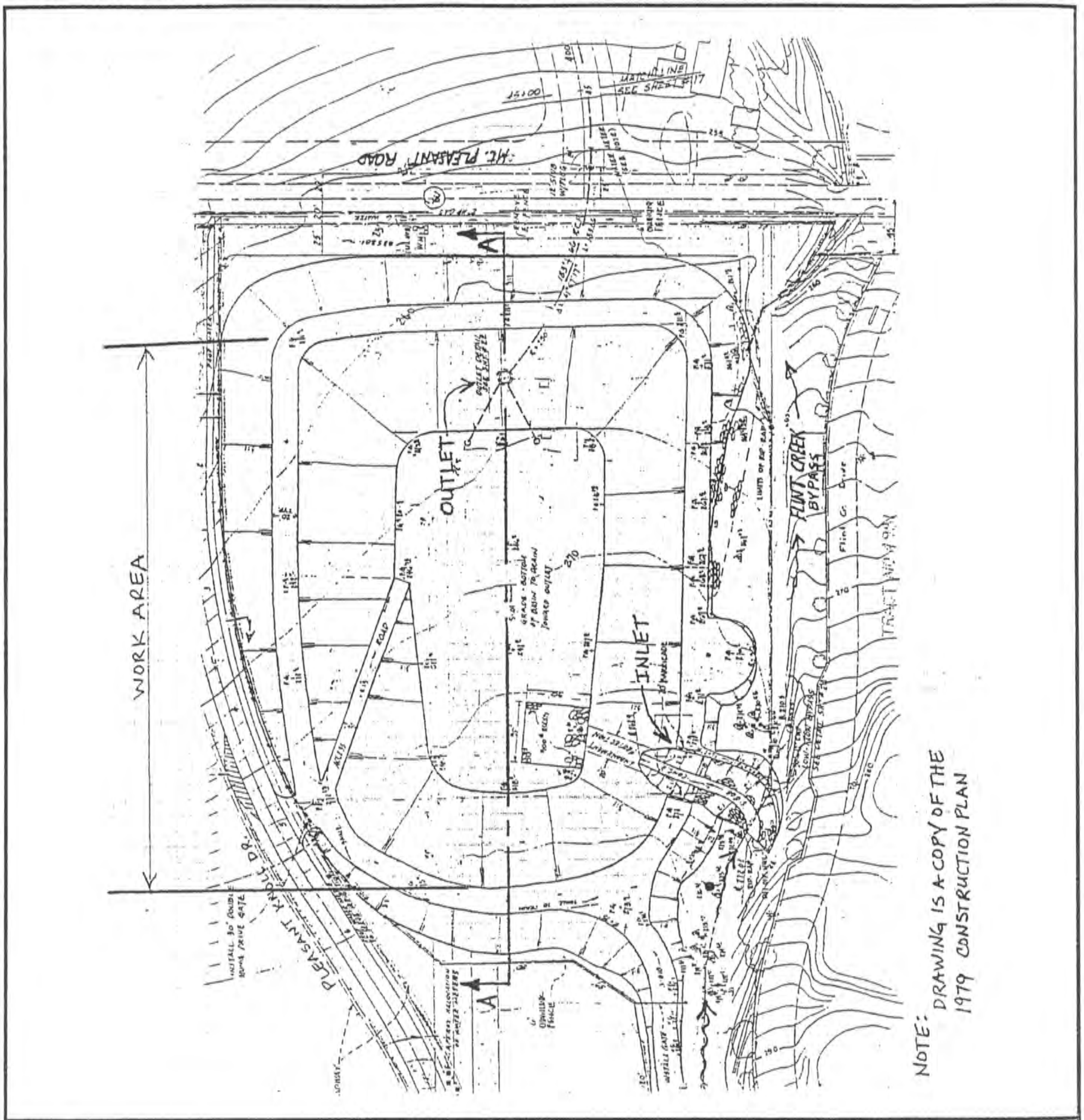
500 0 500 1000 Feet

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:
Flint Debris Basin
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure A-10b-Plan View, Flint Debris Basin, upstream of Mt. Pleasant Rd.



NOTE: DRAWING IS A COPY OF THE 1979 CONSTRUCTION PLAN

PURPOSE: To remove sediment to restore capacity.

PLAN VIEW

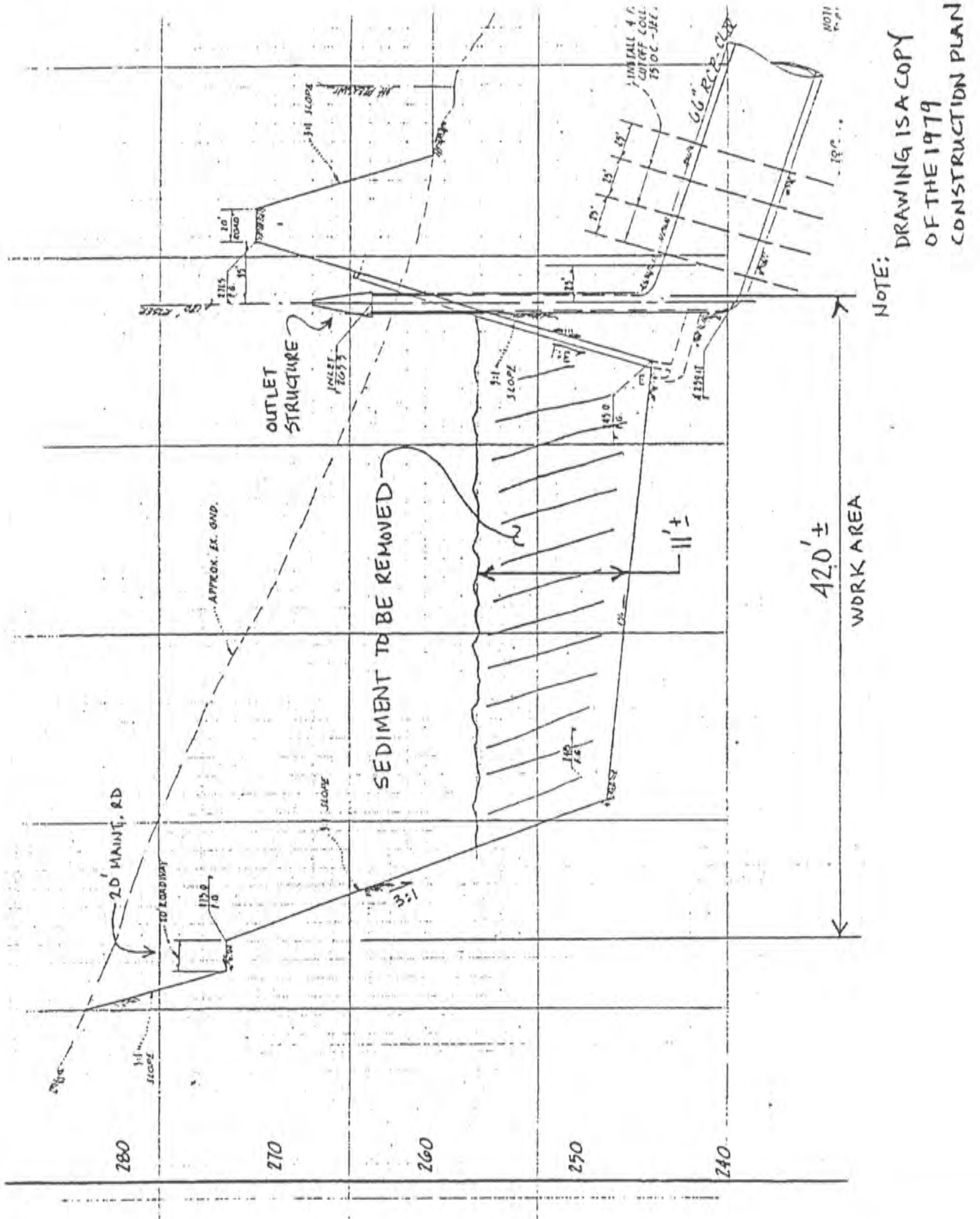
Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:
Flint Debris Basin
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure A-10c-Typical Section, Flint Debris Basin, upstream of Mt. Pleasant Rd.



PURPOSE: To remove sediment to restore capacity.

TYPICAL SECTION

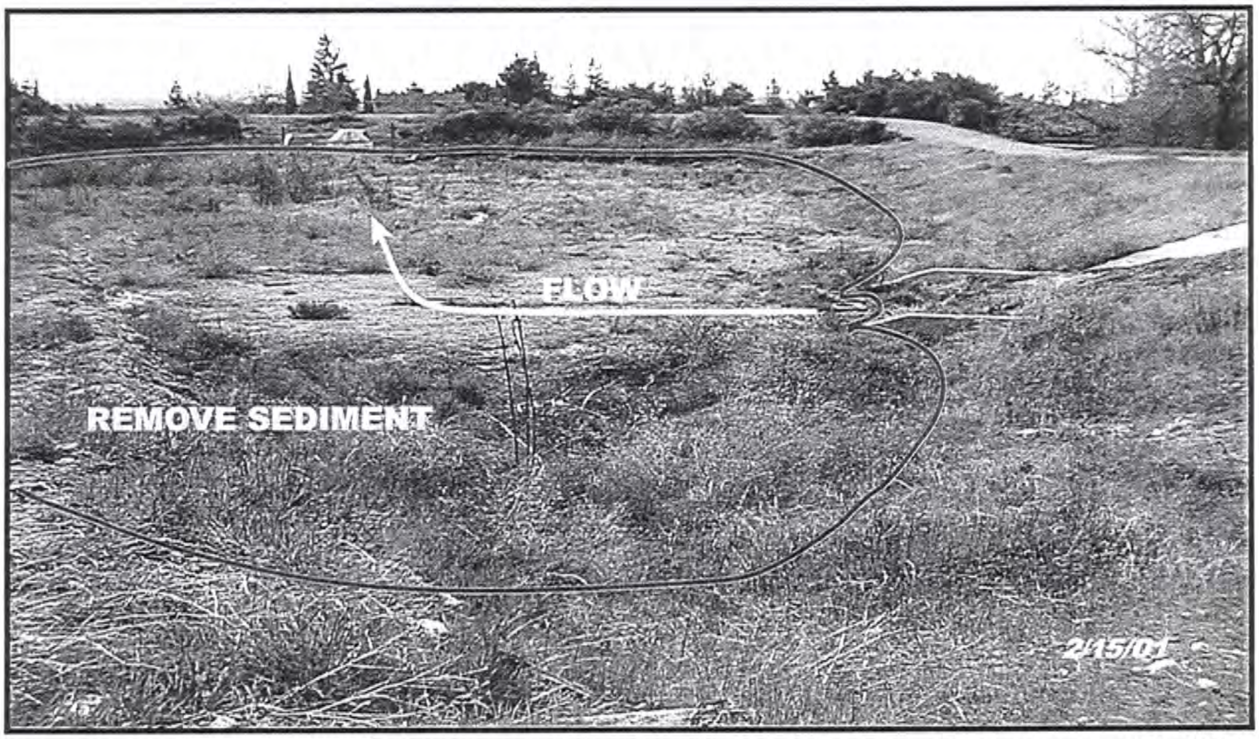
Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:
Flint Debris Basin
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

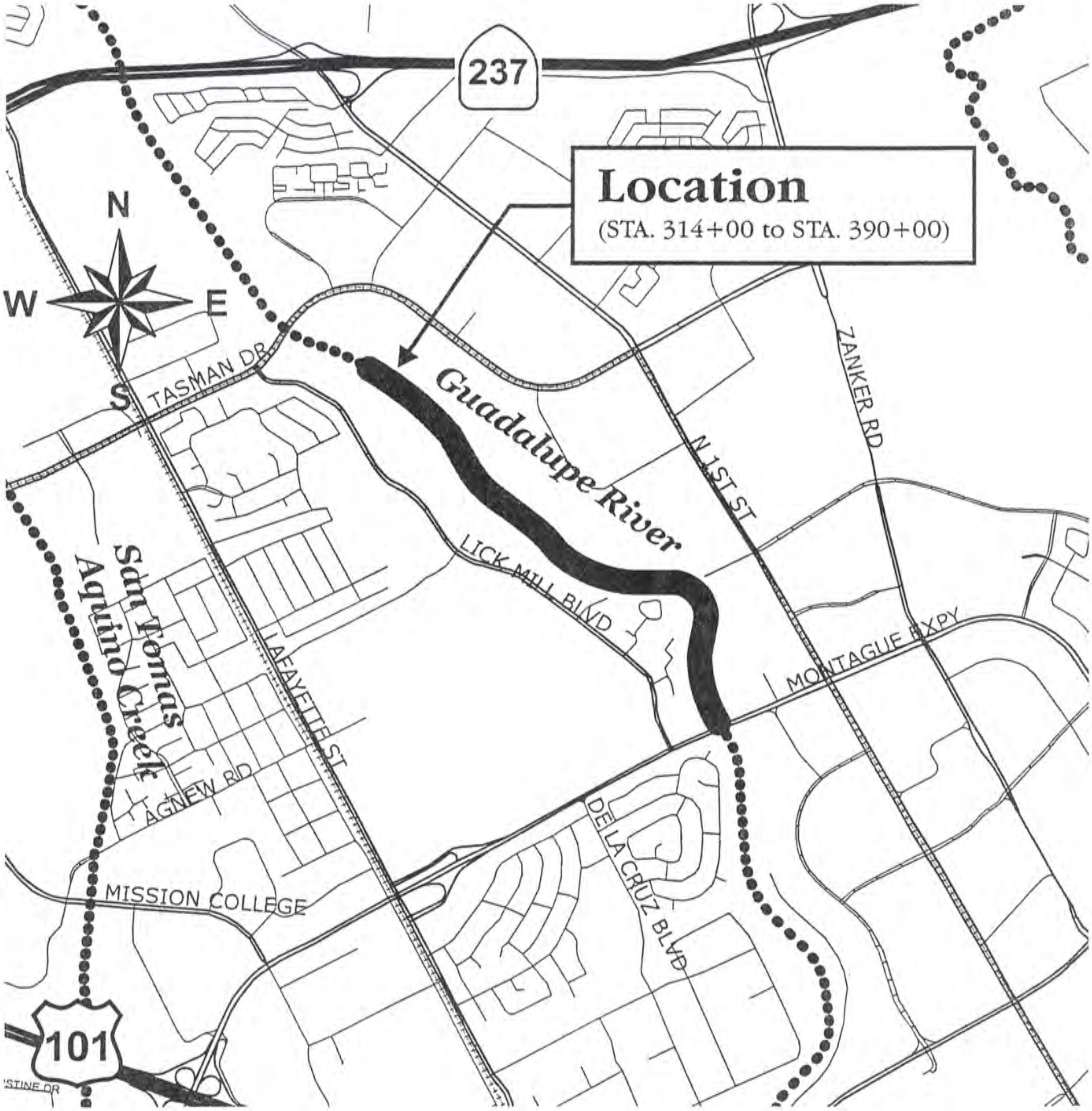
04/27/2001 11:00 a.m.

Figure A-10d - Flint Debris Basin - upstream of Mount Pleasant Road.



View 1 - Looking downstream towards outlet structure in Flint Debris Basin at sediment basin. *(Flint11)*

Figure A-11a-Vicinity Map, Guadalupe River, upstream of Tasman Dr. to Montague Expwy.



PURPOSE: To remove sediment from flood control channels to restore capacity.

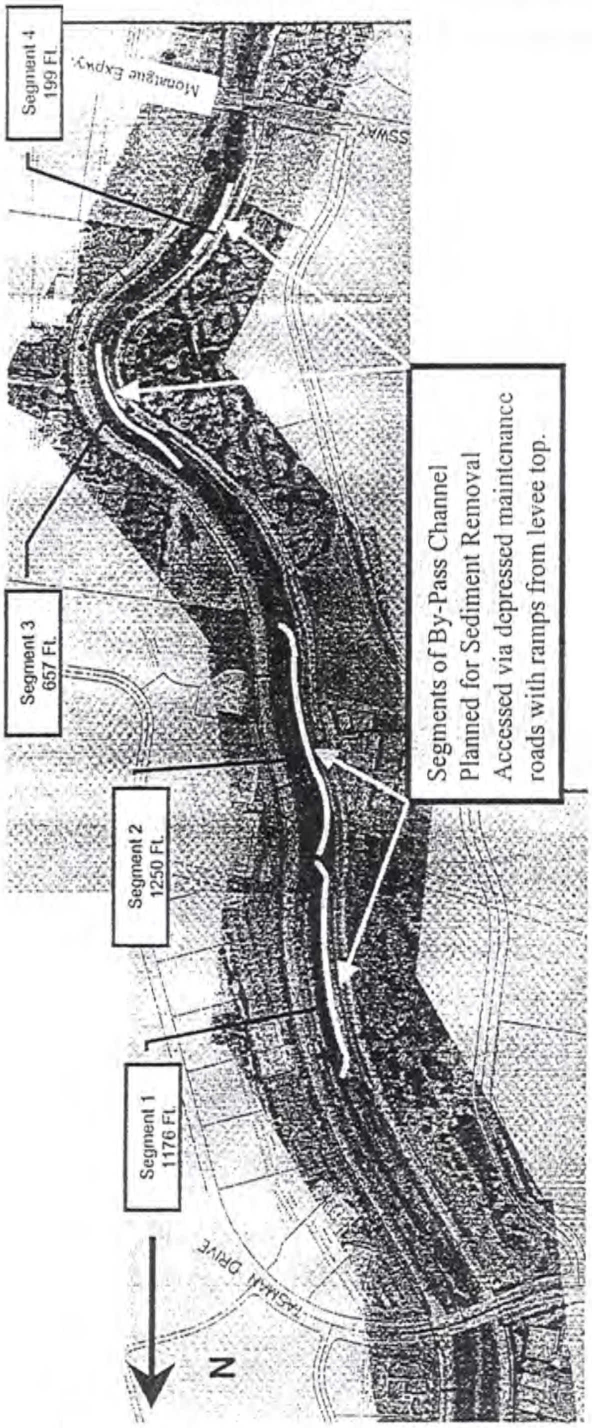
VICINITY MAP

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:
Guadalupe River
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley
Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure A-11b-Plan View, Guadalupe River upstream of Tasman Dr. to Montague Expwy.


Segment 4
199 Ft.
Montague Expwy.
Segment 3
657 Ft.
Segment 2
1250 Ft.
Segment 1
1176 Ft.
Segments of By-Pass Channel
Planned for Sediment Removal
Accessed via depressed maintenance
roads with ramps from levee top.
TASMAN DRIVE
N

PURPOSE: To remove sediment from flood control channels to restore capacity.

PLAN VIEW

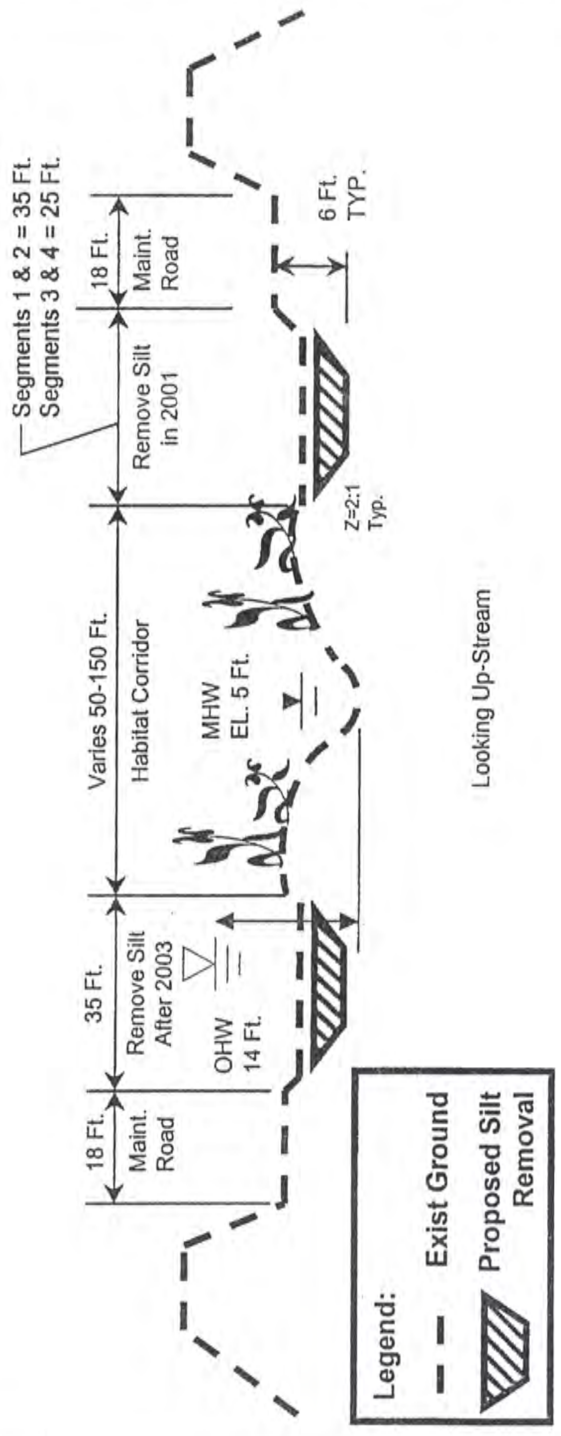
Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:
Guadalupe River
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley
Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure A-11c-Typical Section, Guadalupe River, upstream of Tasman Dr. to Montague Expwy.



PURPOSE: To remove sediment from flood control channels to restore capacity.

TYPICAL SECTION

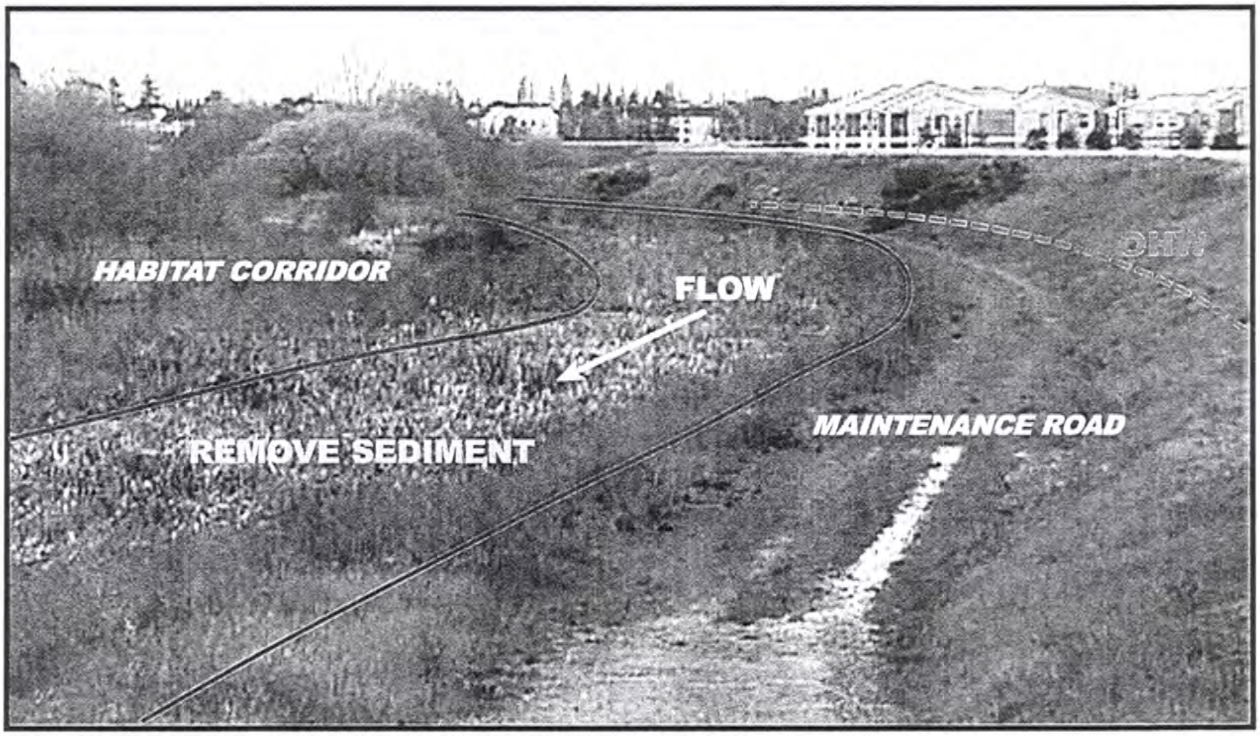
Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:
Guadalupe River
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

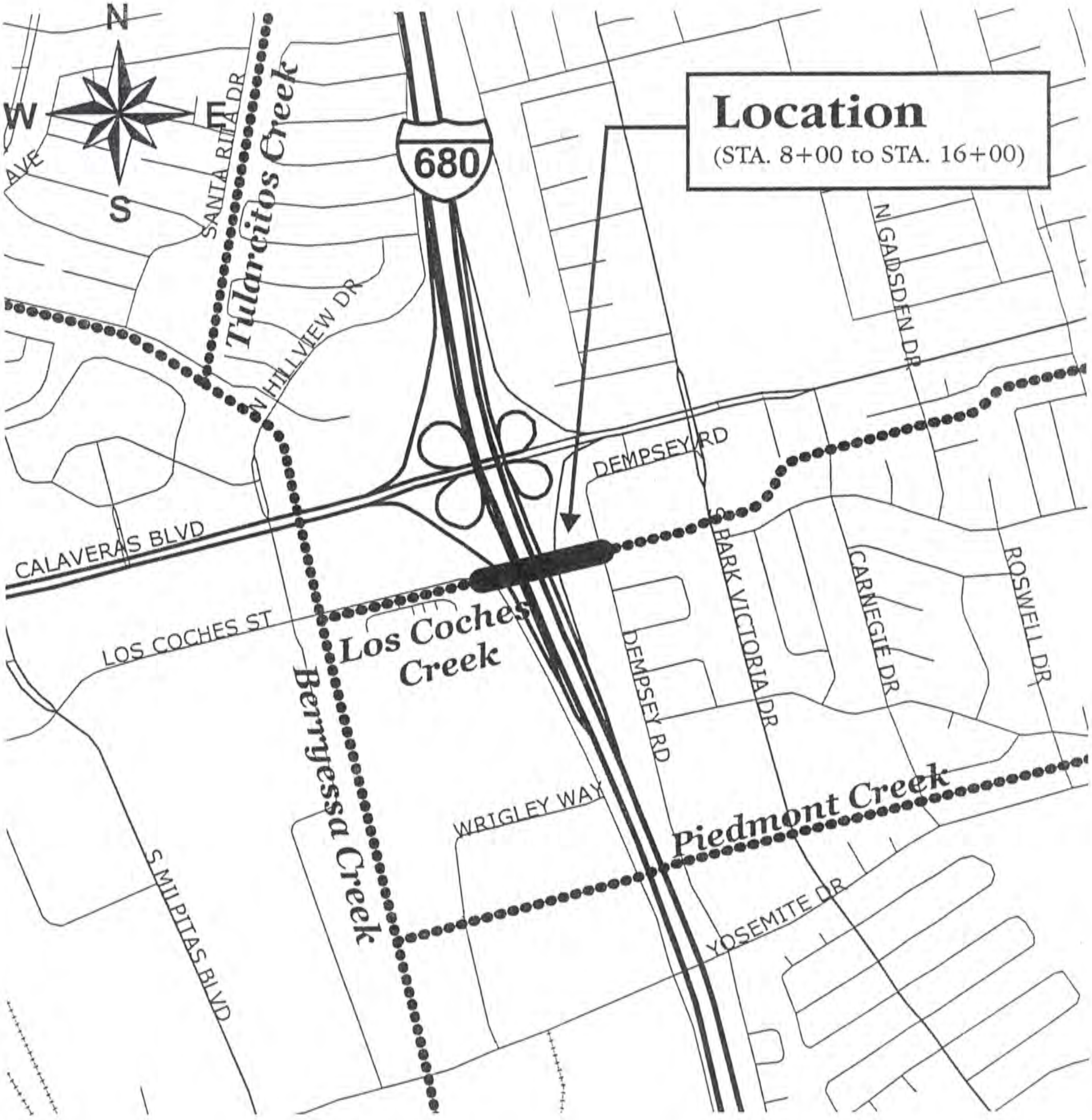
04/27/2001 11:00 a.m.

Figure A-11d - Guadalupe upstream from Tasman Drive to Montague Expressway.



View 1 - A typical cross section looking upstream 500 feet from Tasman Drive to Montague Expressway. *(Guadalupe u-s hetch hetchy 1.jpg)*

Figure A-12a-Vicinity Map, Los Coches Creek, downstream Interstate 680 to Dempsey Rd.



PURPOSE: To remove sediment from flood control channels to restore capacity.

VICINITY MAP

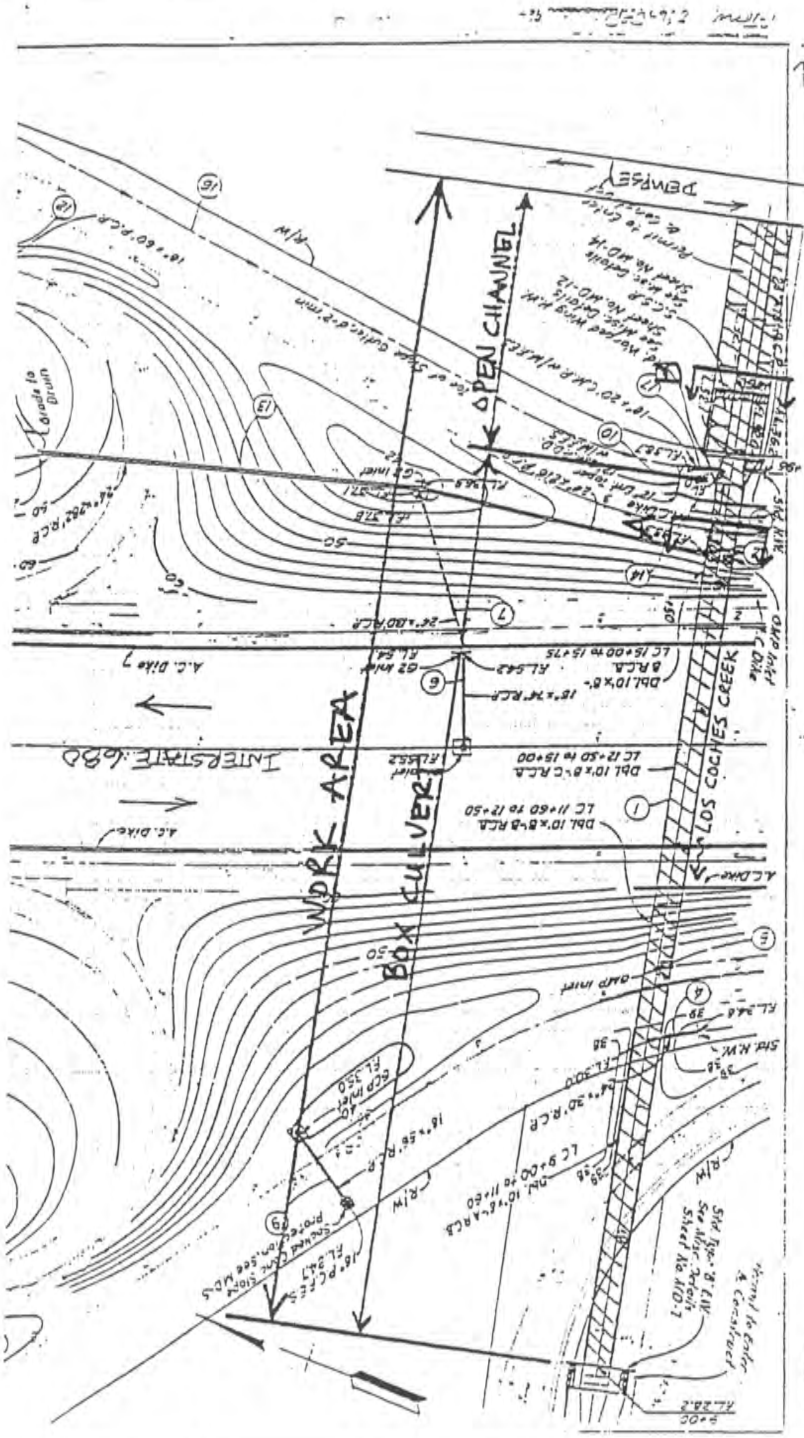
500 0 500 1000 Feet

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:
Los Coches Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley
Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure A-12b-Plan View, Los Coches Creek, downstream Interstate 680 to Dempsey Rd.

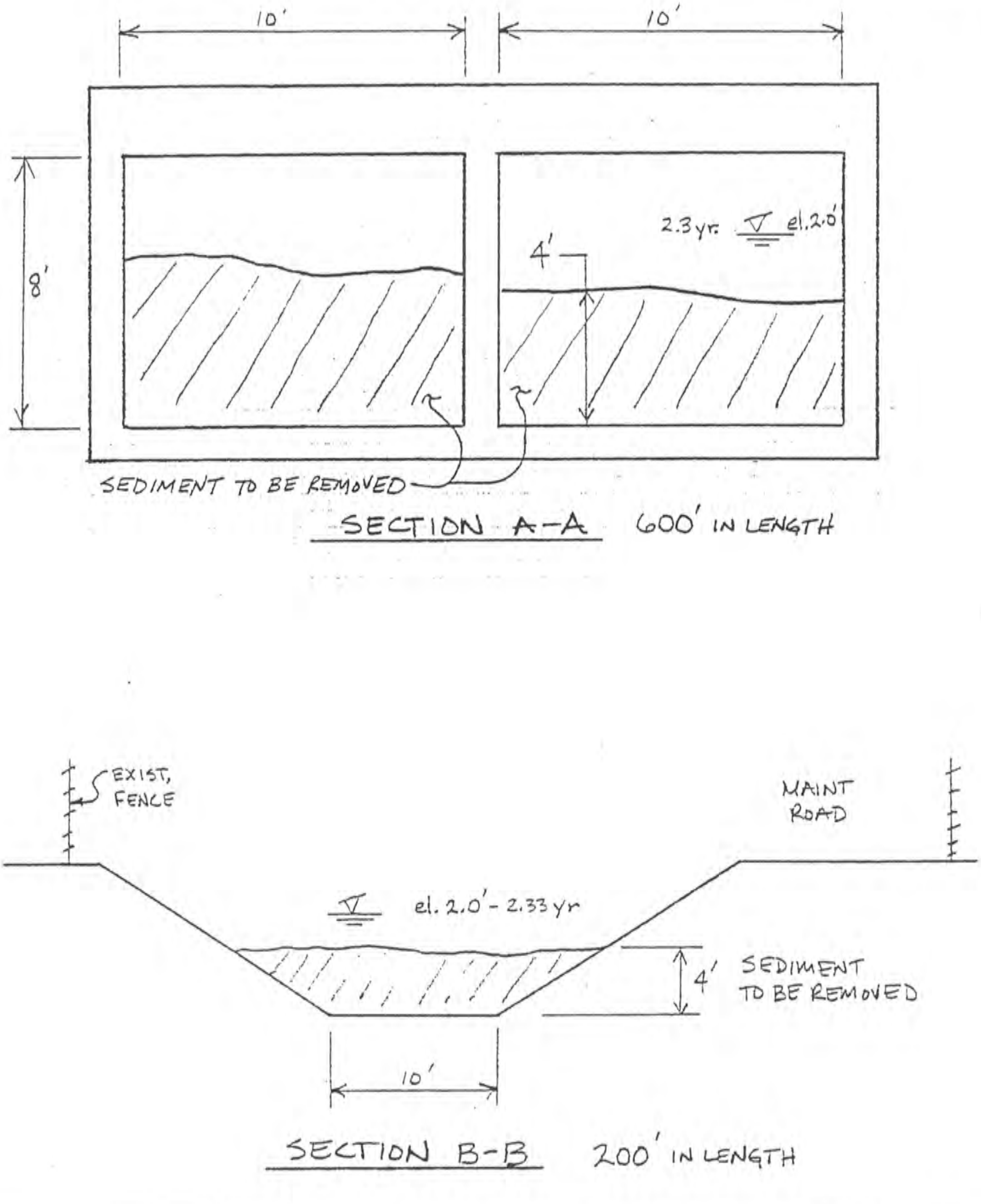


NOTE:
DRAWING IS A COPY OF CALTRANS
1967 CONSTRUCTION PLAN

PURPOSE: To remove sediment from flood control channels to restore capacity.	**PLAN VIEW** Not to scale Santa Clara Valley Water District 5750 Almaden Expressway San Jose, California 95118 www.scvwd.dst.ca.us	*PROPOSED SEDIMENT REMOVAL IN:* Los Coches Creek *COUNTY OF:* Santa Clara *APPLICATION BY:* Santa Clara Valley Water District *DATE:* May 2001

04/27/2001 11:00 a.m.

Figure A-12c-Typical Section, Los Coches Creek, downstream Interstate 680 to Dempsey Rd.



PURPOSE: To remove sediment from flood control channels to restore capacity.

TYPICAL SECTION

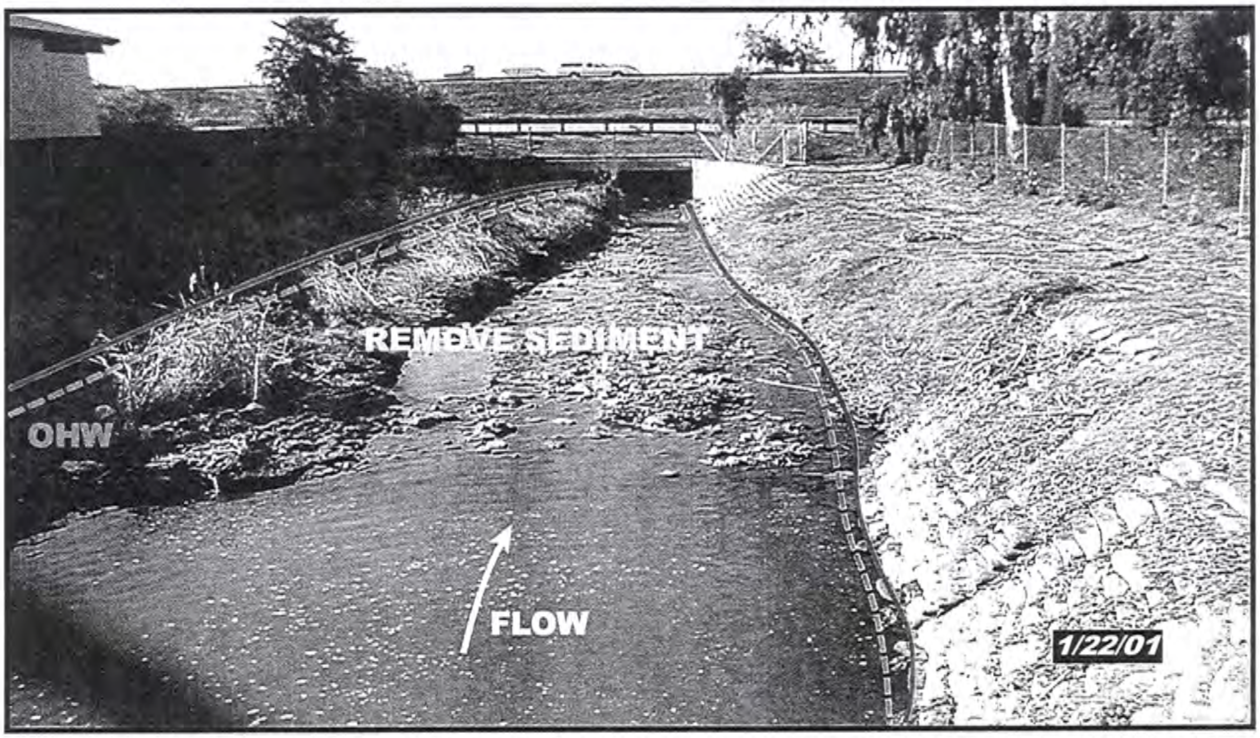
Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:
Los Coches Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

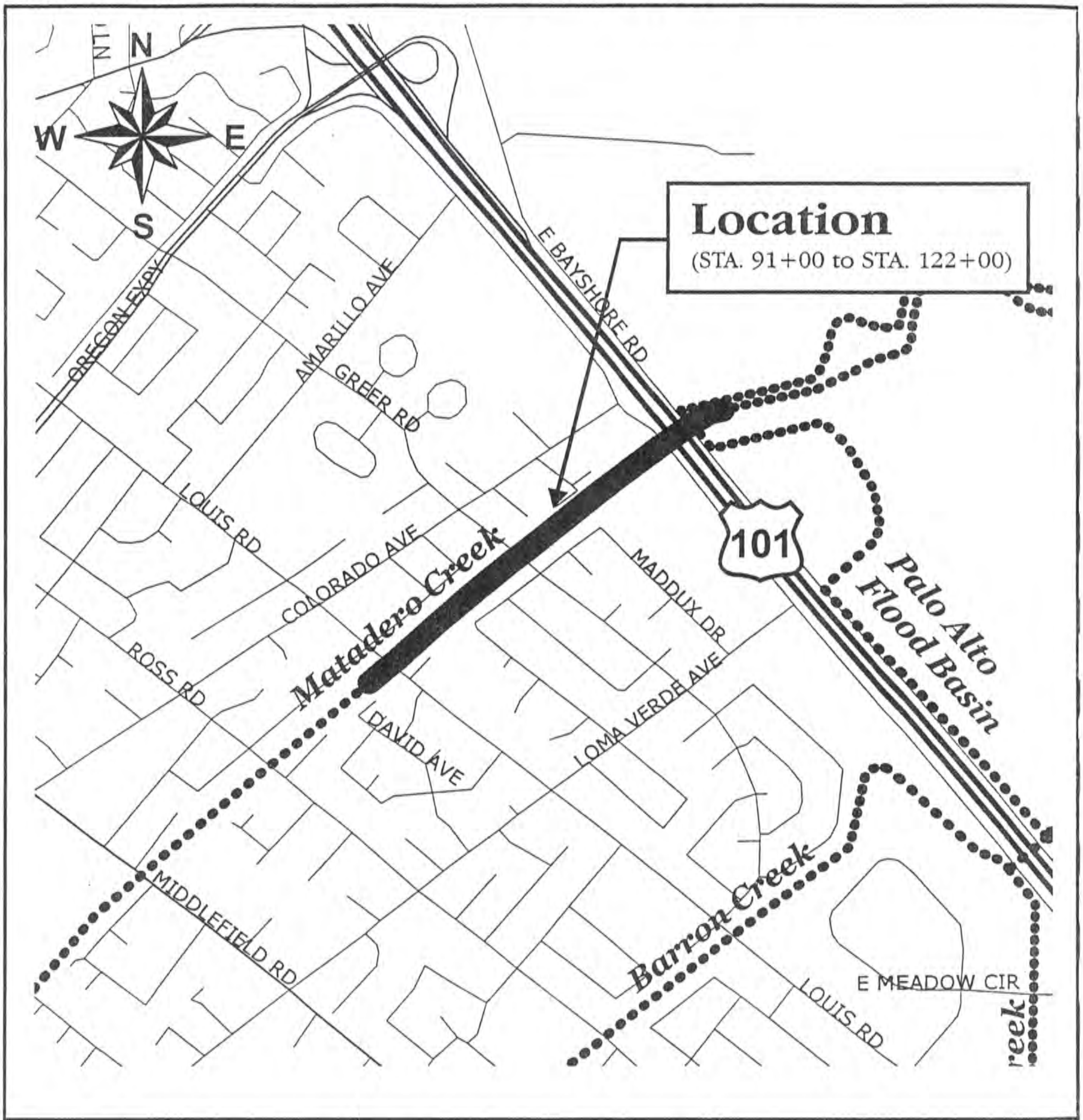
04/27/2001 11:00 a.m.

Figure A-12c - Los Coches Creek - downstream of Dempsey Road.



View 1 - Looking downstream of Dempsey Road towards Interstate 680 at sediment removal area. *(LosCoches14.jpg)*

Figure A-13a-Vicinity Map, Matadero Creek, Highway 101 to Louis Rd.



PURPOSE: To remove sediment from flood control channels to restore capacity.

VICINITY MAP

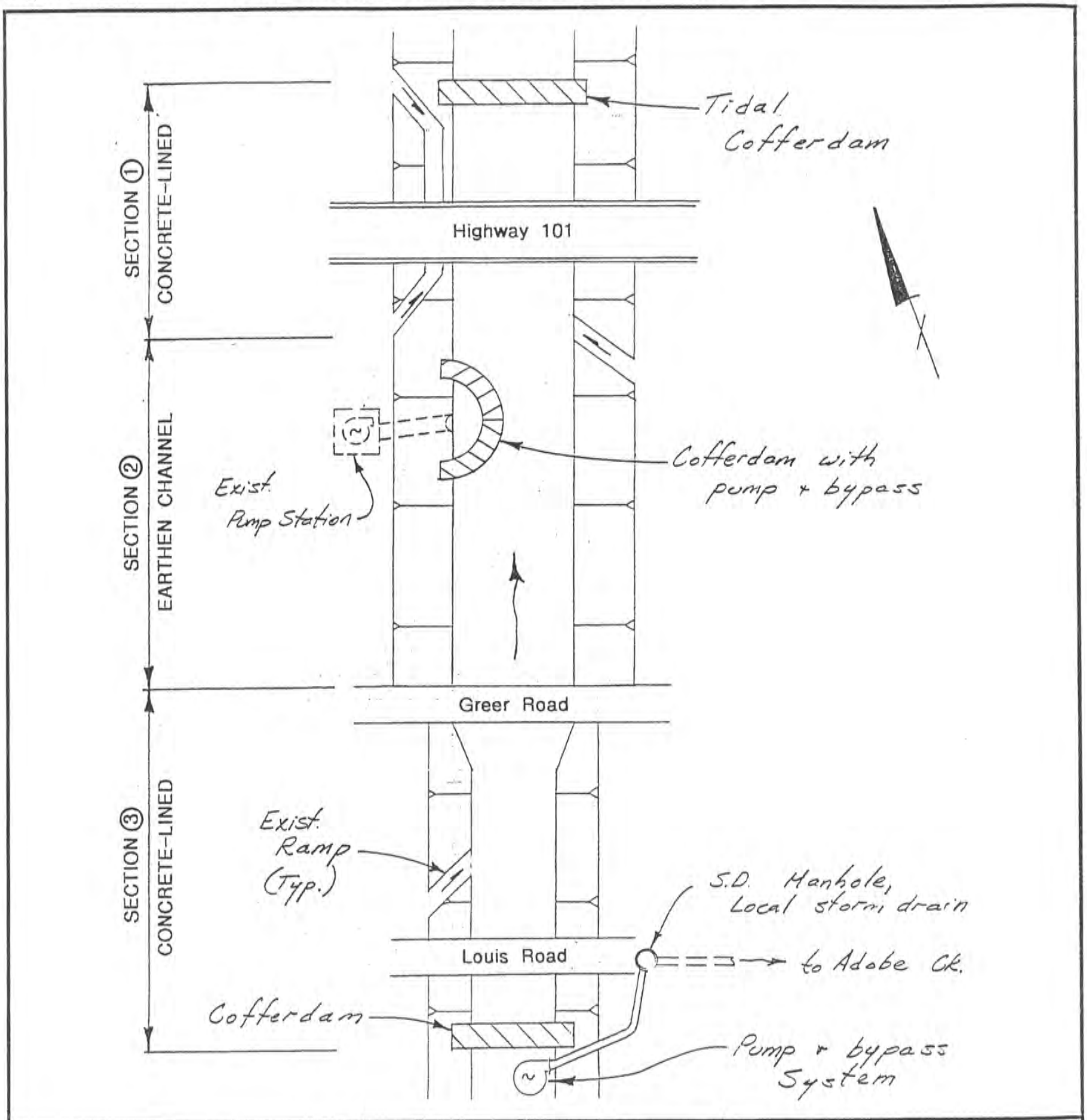
500 0 500 1000 Feet

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:
Matadero Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley
Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure A-13b-Plan View, Matadero Creek, Highway 101 to Louis Rd.



PURPOSE: To remove sediment from flood control channels to restore capacity.

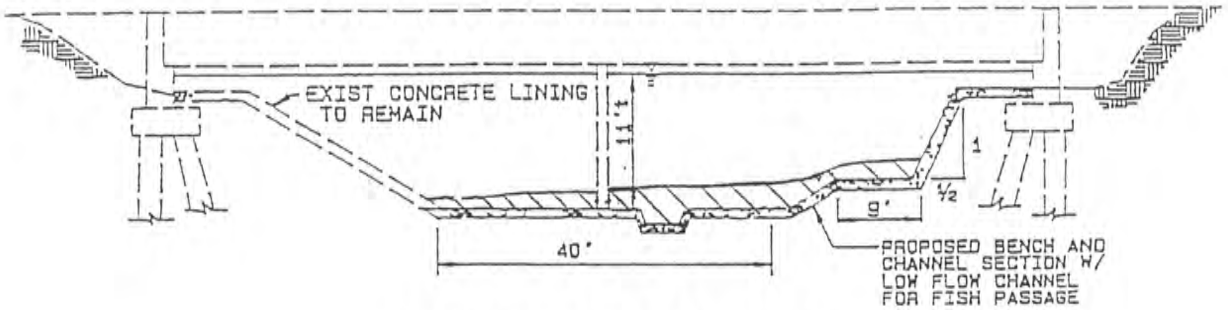
PLAN VIEW

Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

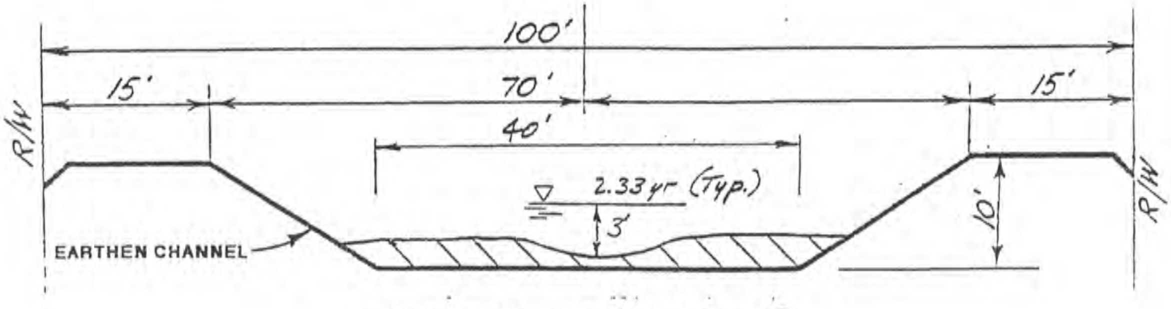
PROPOSED SEDIMENT REMOVAL IN:
Matadero Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

Figure A-13c-Typical Section, Matadero Creek, Highway 101 to Louis Rd.


EXIST CONCRETE LINING TO REMAIN
11'±
1
½
9'
40'
PROPOSED BENCH AND CHANNEL SECTION W/ LOW FLOW CHANNEL FOR FISH PASSAGE

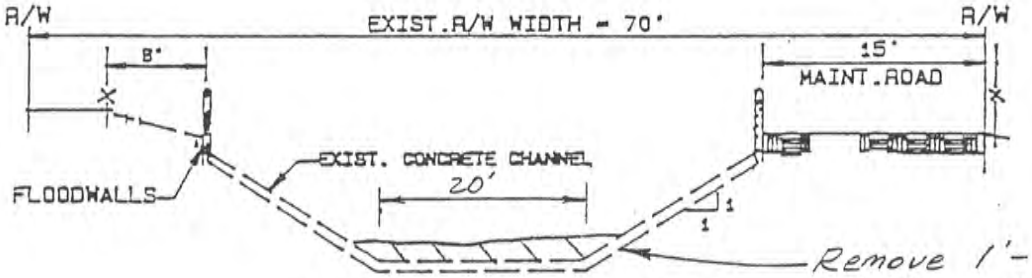
TYPICAL SECTION ①

at Highway 101



TYPICAL SECTION ②

Highway 101 to Greer Road



Remove 1'-3' Sediment from Channel Bottom (Typical)

TYPICAL SECTION ③

Greer Road to Louis Road

PURPOSE: To remove sediment from flood control channels to restore capacity.

TYPICAL SECTION

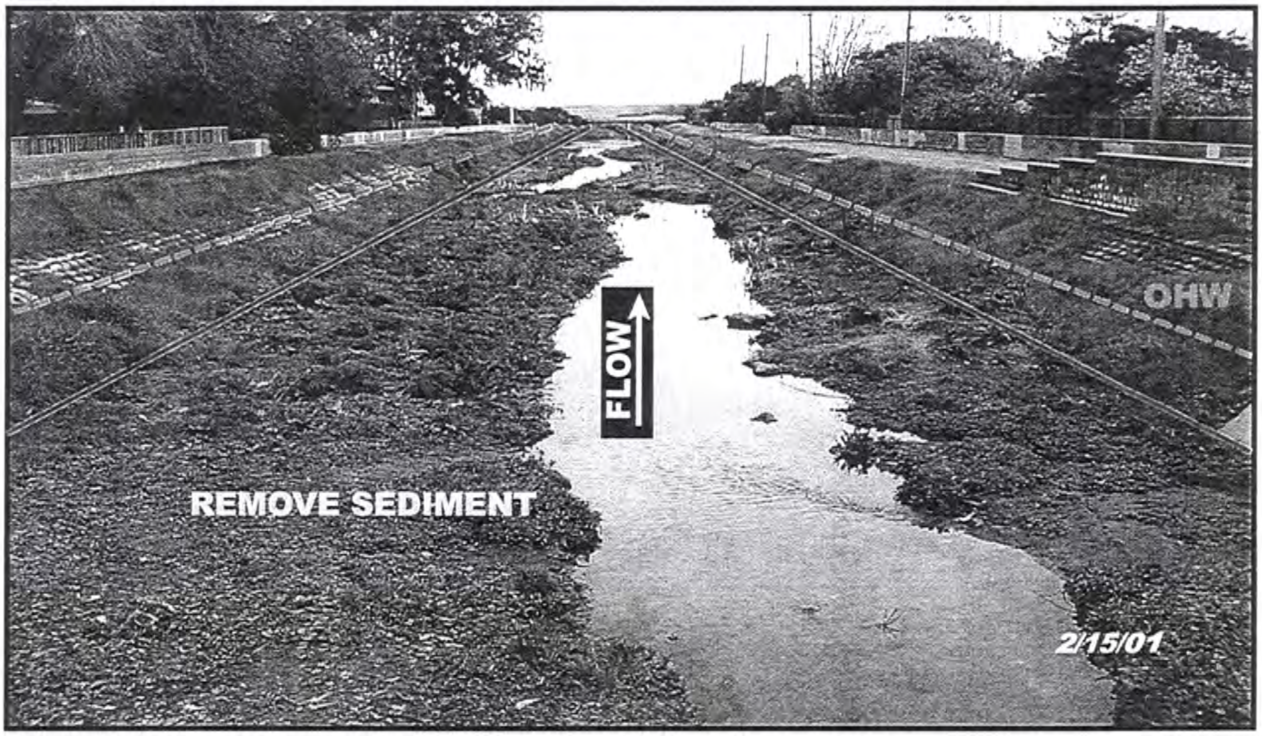
Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

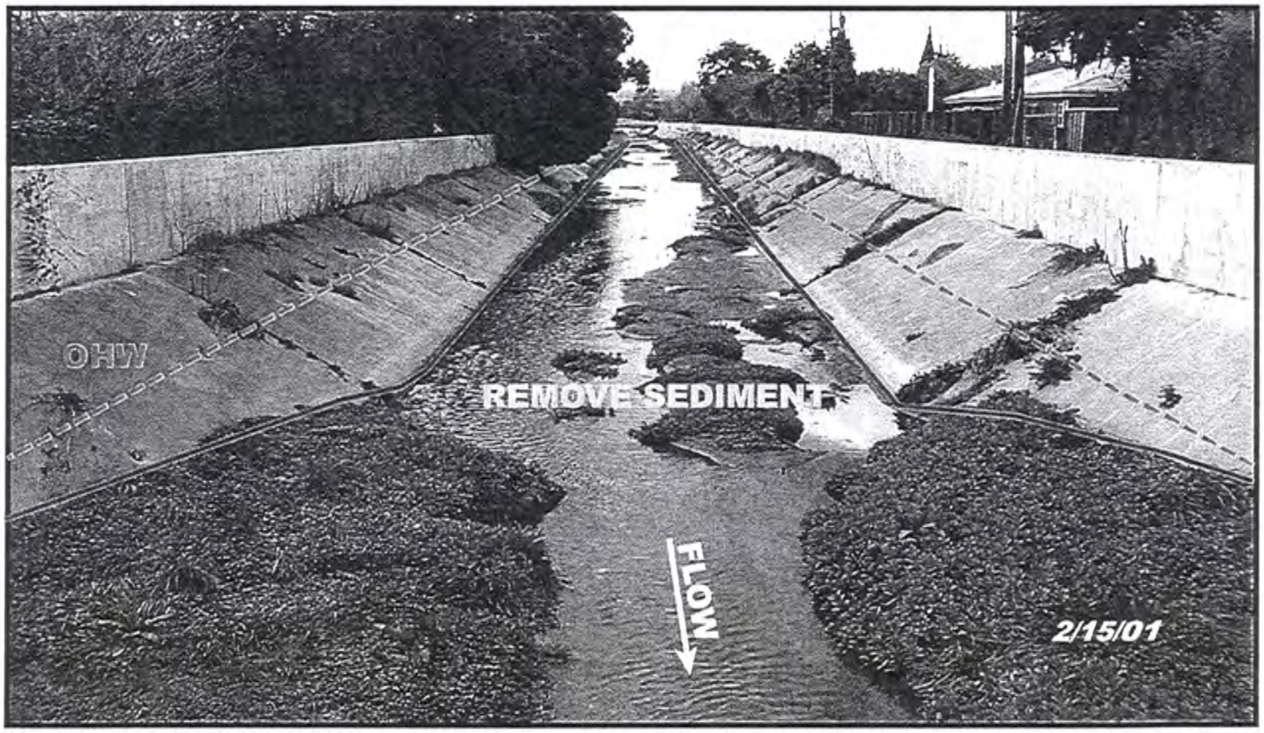
PROPOSED SEDIMENT REMOVAL IN:
Matadero Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley
Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure A-13e - Matadero Creek, Highway 101 to Louis Road.

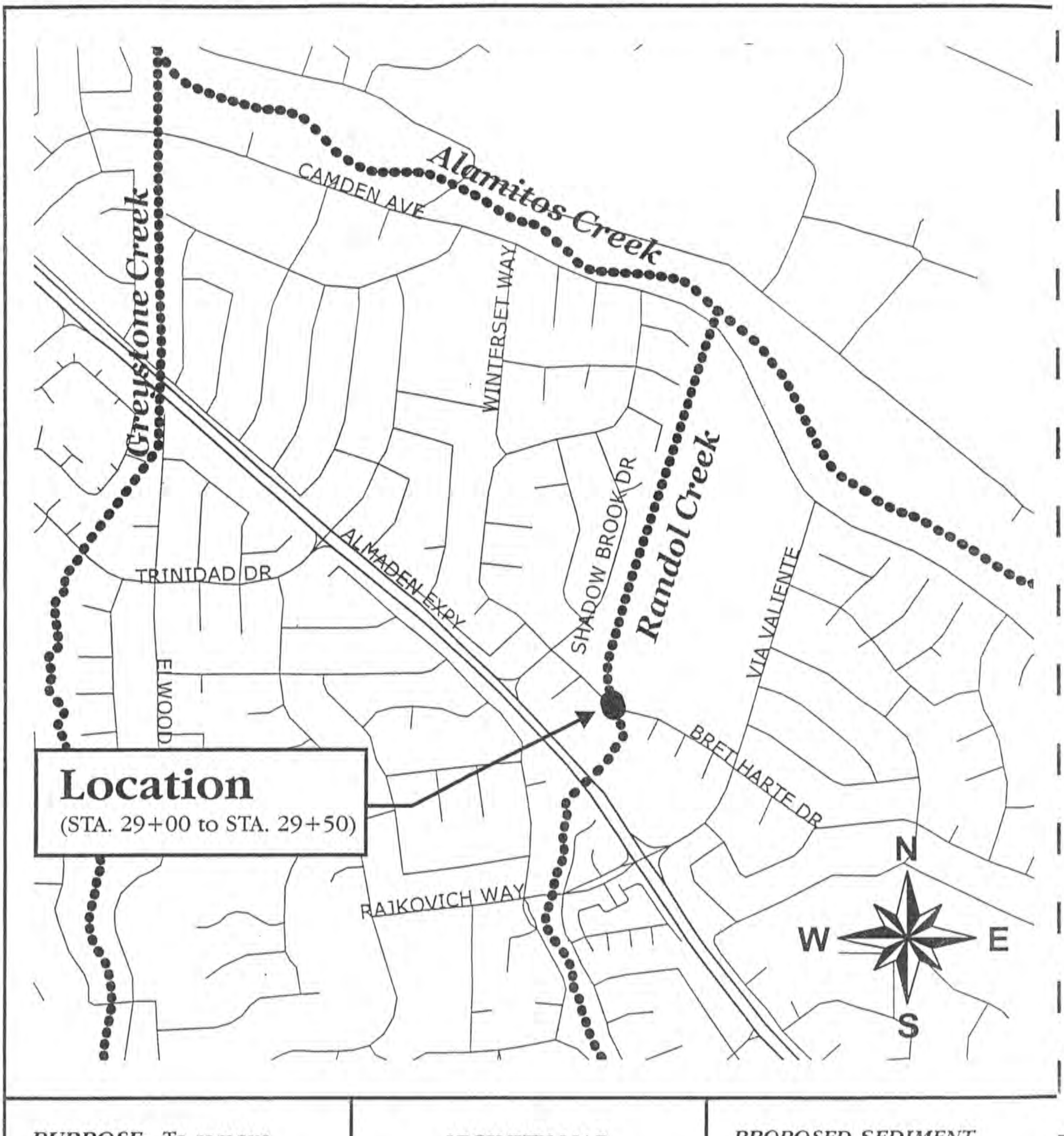


View 1 - Looking downstream from Greer Road. Project includes removal of approximately 4,000 cubic yards of sediment from earthen and concrete-lined channel. *(Matadero, 101 to Louis, View1 (Site15).jpg)*



View 2 - Looking upstream from Greer Road at concrete-lined portion of channel. *(Matadero, 101 to Louis, View2 (Site15).jpg)*

Figure A-14a-Vicinity Map, Randol Creek, upstream and downstream of Bret Harte Dr.



PURPOSE: To remove sediment from flood control channels to restore capacity.

VICINITY MAP

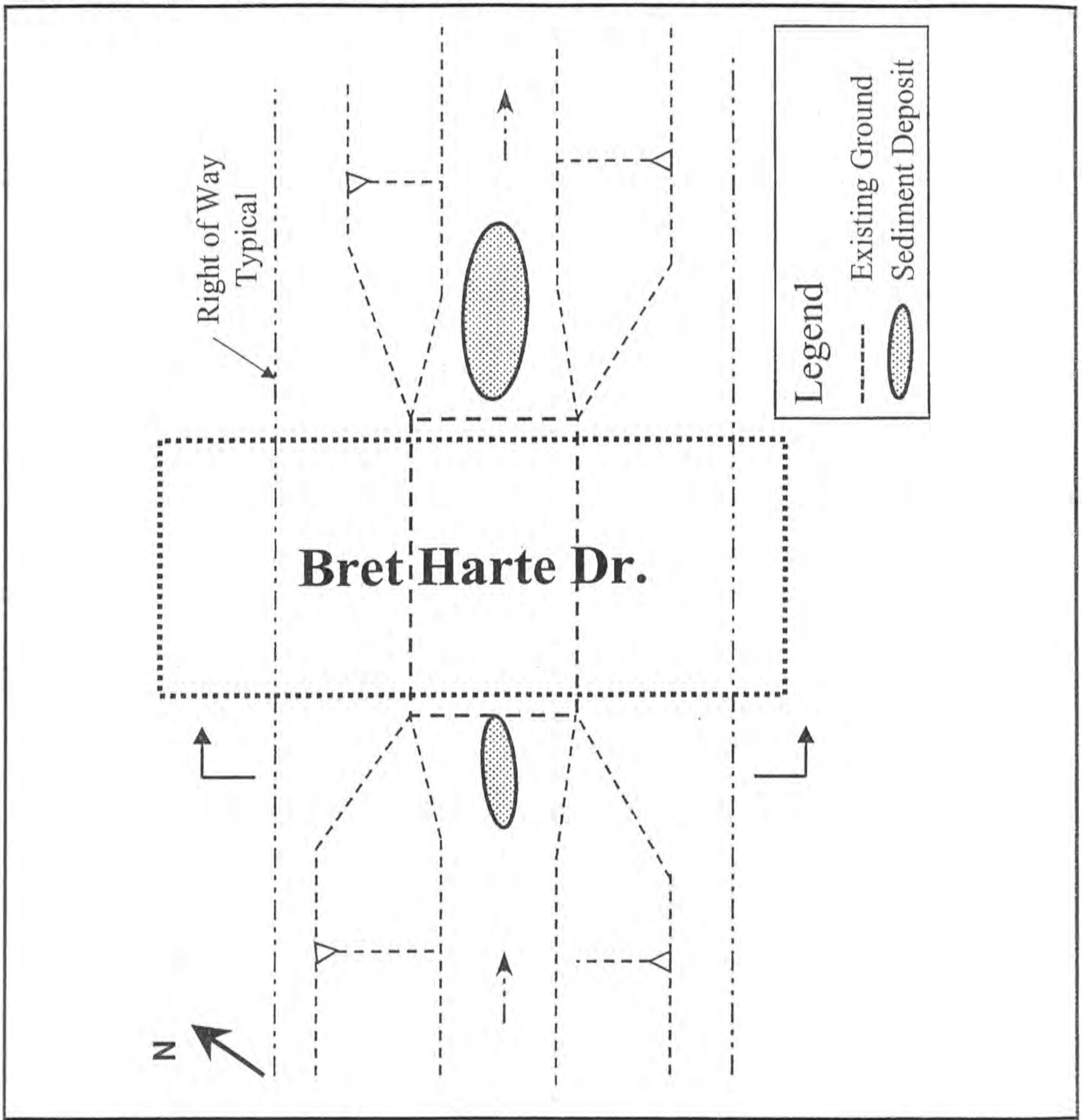
500 0 500 1000 Feet

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:
Randol Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

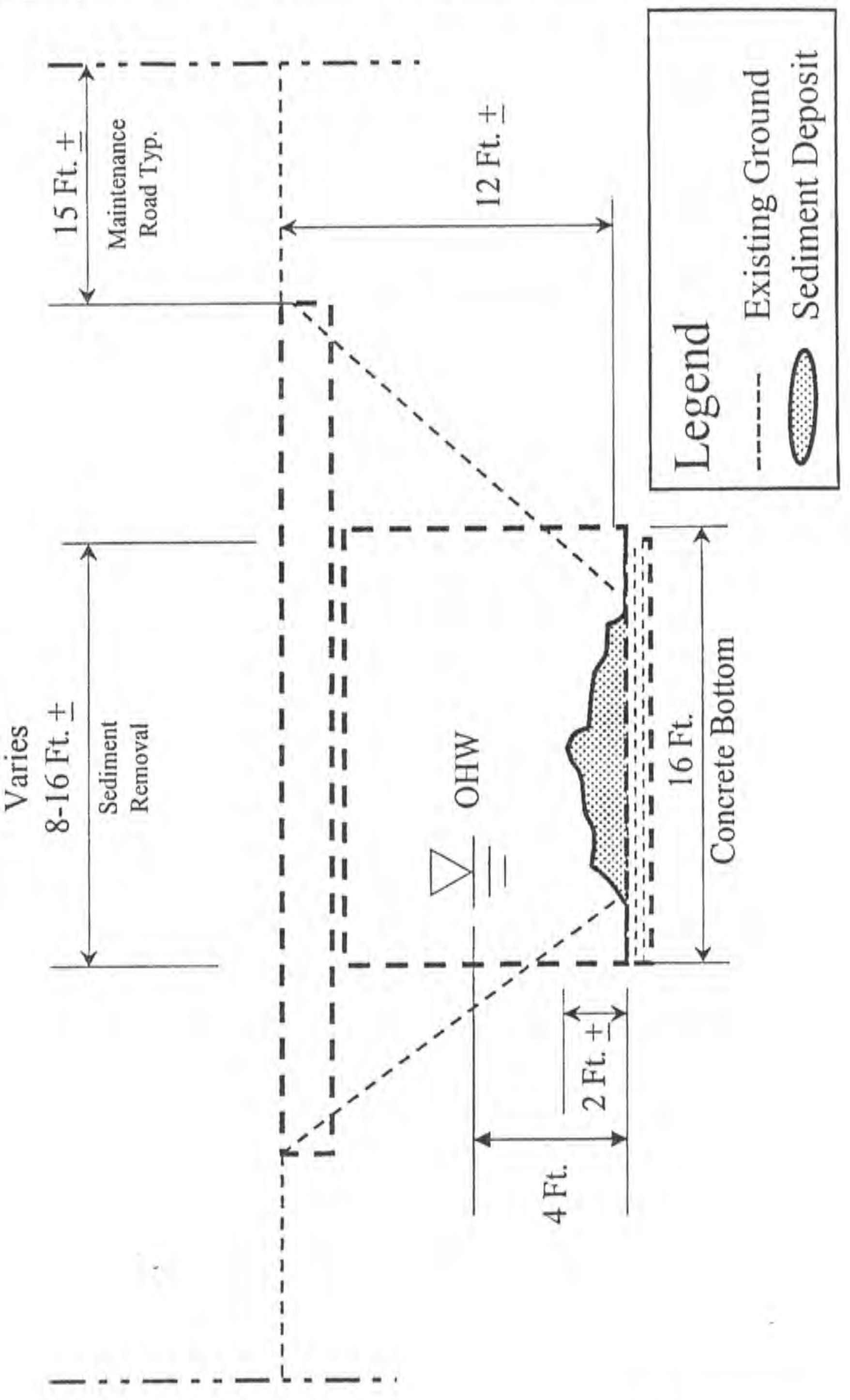
Figure A-14b-Plan View, Randol Creek, upstream and downstream of Bret Harte Dr.



PURPOSE: To remove sediment from flood control channels to restore capacity.	**PLAN VIEW** Not to scale Santa Clara Valley Water District 5750 Almaden Expressway San Jose, California 95118 www.scvwd.dst.ca.us	*PROPOSED SEDIMENT REMOVAL IN:* Randol Creek *COUNTY OF:* Santa Clara *APPLICATION BY:* Santa Clara Valley Water District *DATE:* May 2001

04/27/2001 11:00 a.m.

Figure A-14c-Typical Section, Randol Creek, upstream and downstream of Bret Harte Dr.



PURPOSE: To remove sediment from flood control channels to restore capacity.

TYPICAL SECTION

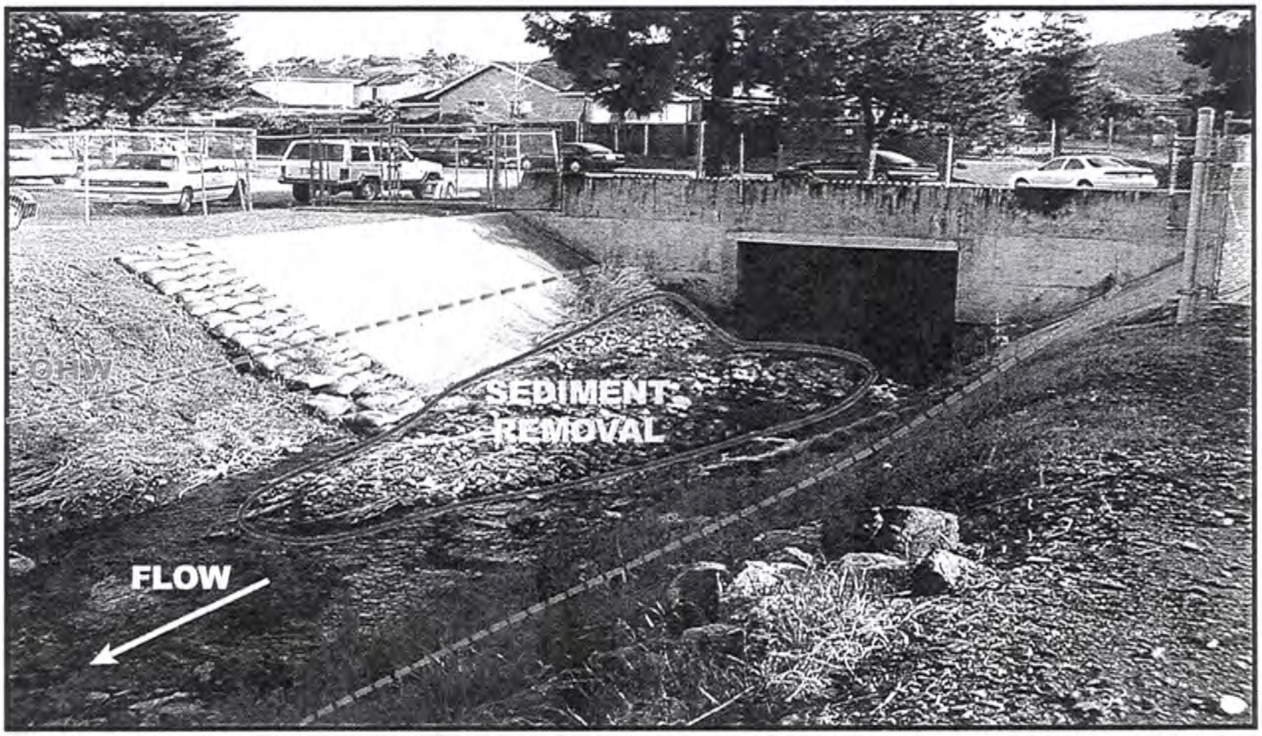
Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:
Randol Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

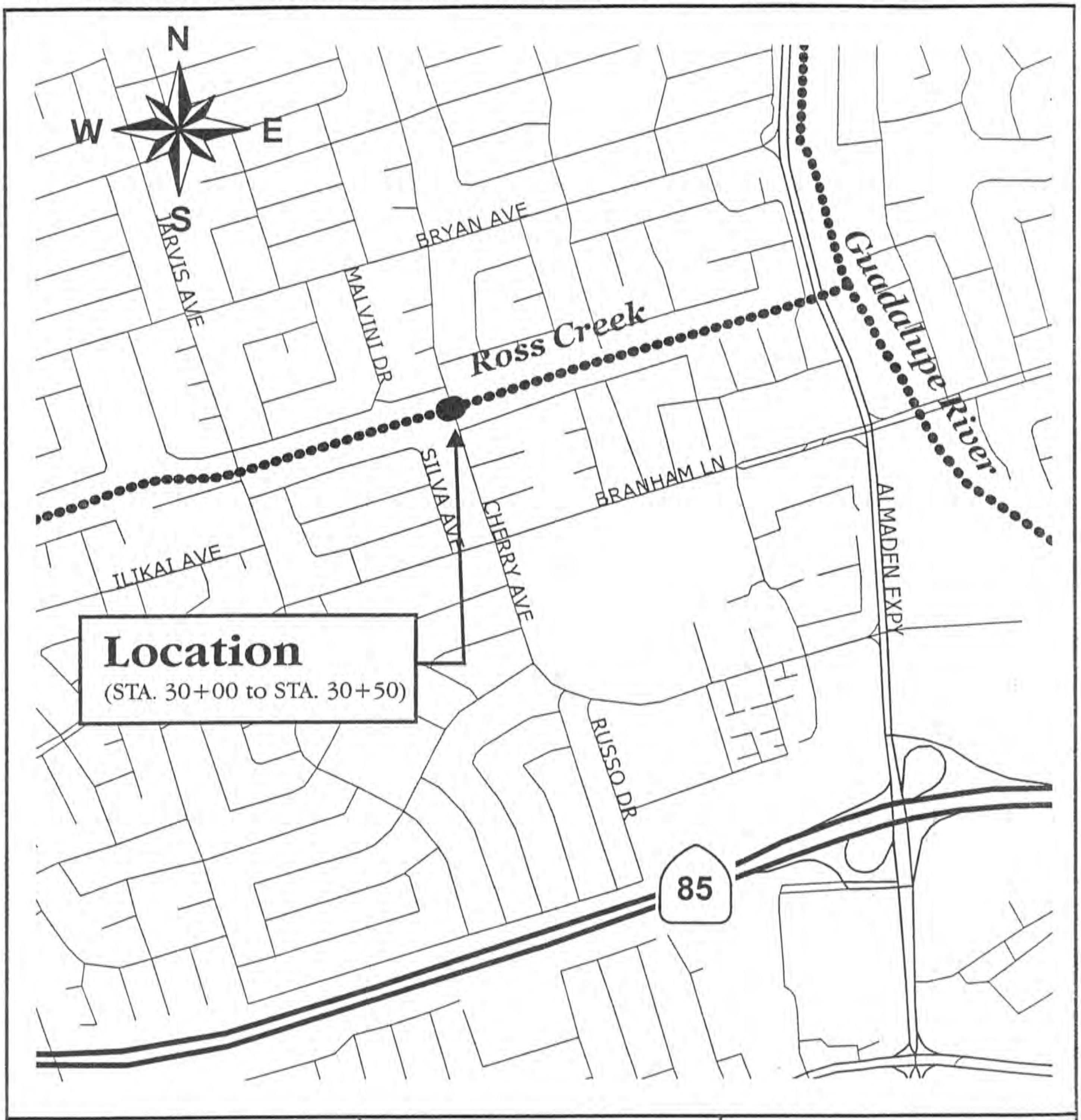
04/27/2001 11:00 a.m.

Figure A-14d - Randol Creek upstream and downstream of Bret Harte Avenue.



View 1 - Randol Creek looking upstream: chronic sediment deposition location. *(MVC-003s.jpg)*

Figure A-15a-Vicinity Map, Ross Creek, upstream and downstream of Cherry Ave.



PURPOSE: To remove sediment from flood control channels to restore capacity.

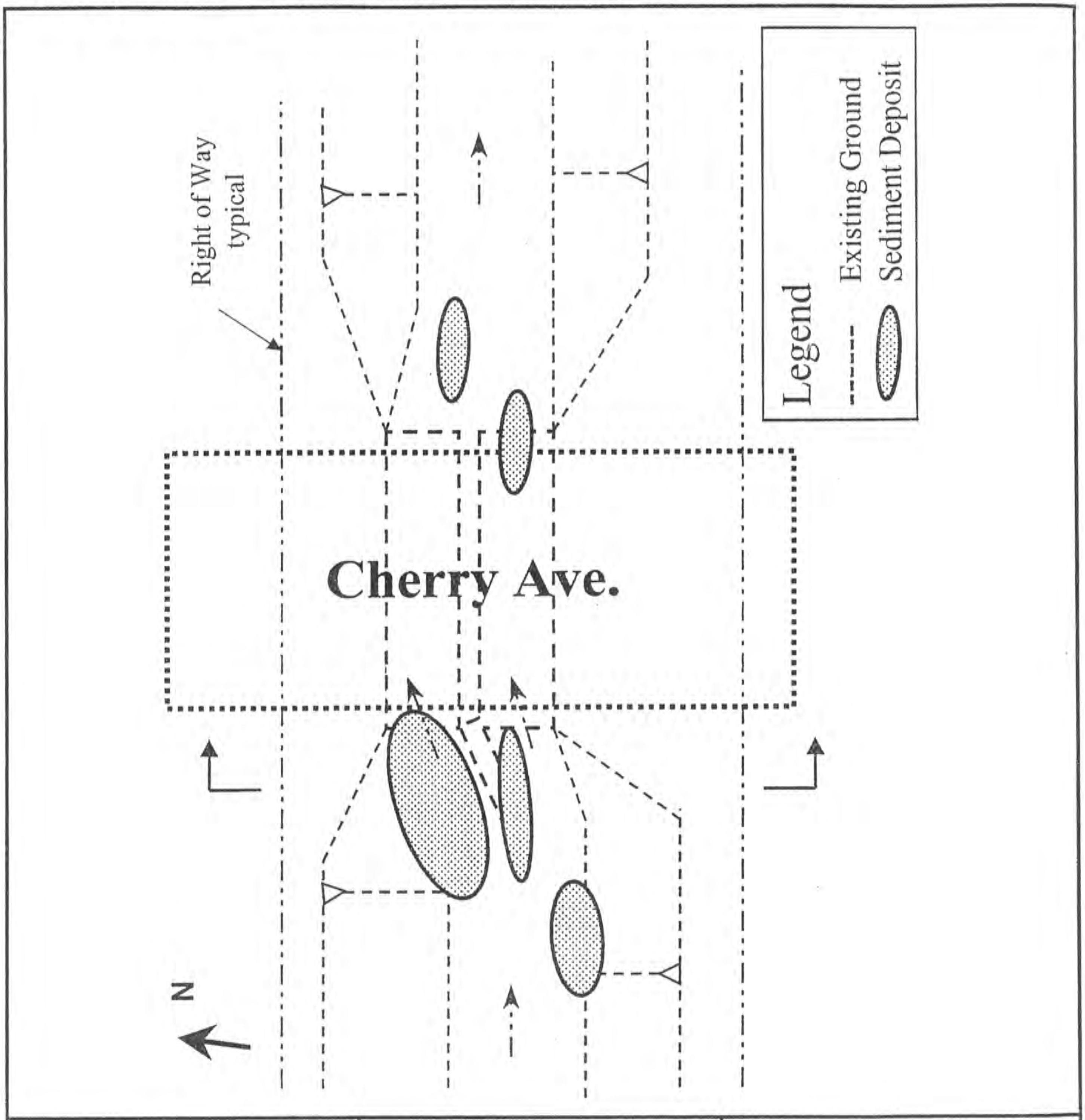
VICINITY MAP

500 0 500 1000 Feet

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

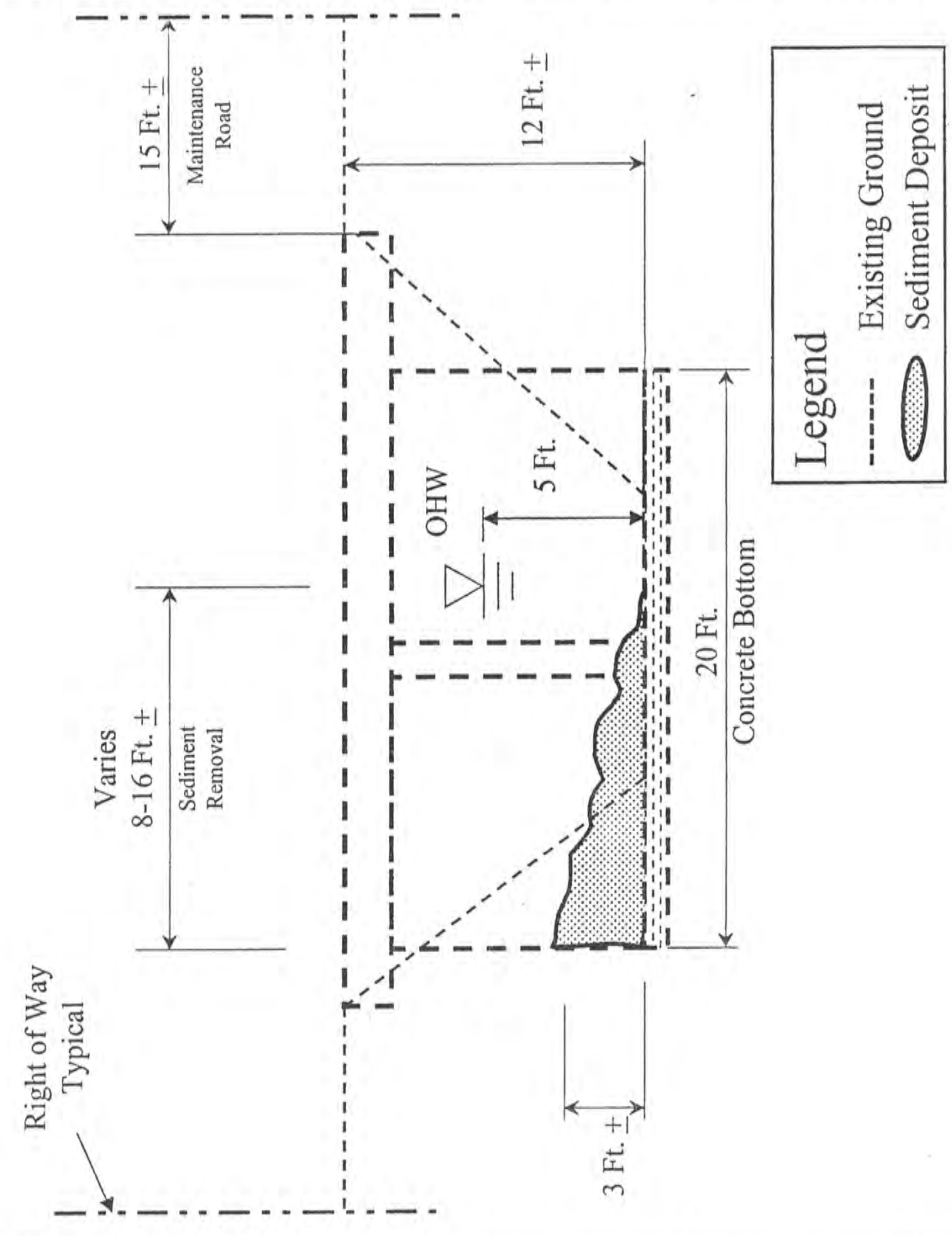
PROPOSED SEDIMENT REMOVAL IN:
Ross Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

Figure A-15b-Plan View, Ross Creek, upstream and downstream of Cherry Ave.



PURPOSE: To remove sediment from flood control channels to restore capacity.	**PLAN VIEW** Not to scale Santa Clara Valley Water District 5750 Almaden Expressway San Jose, California 95118 www.scvwd.dst.ca.us	*PROPOSED SEDIMENT REMOVAL IN:* Ross Creek *COUNTY OF:* Santa Clara *APPLICATION BY:* Santa Clara Valley Water District *DATE:* May 2001

Figure A-15c-Typical Section, Ross Creek, upstream and downstream of Cherry Ave.



PURPOSE: To remove sediment from flood control channels to restore capacity.

TYPICAL SECTION

Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:
Ross Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley
Water District
DATE: May 2001

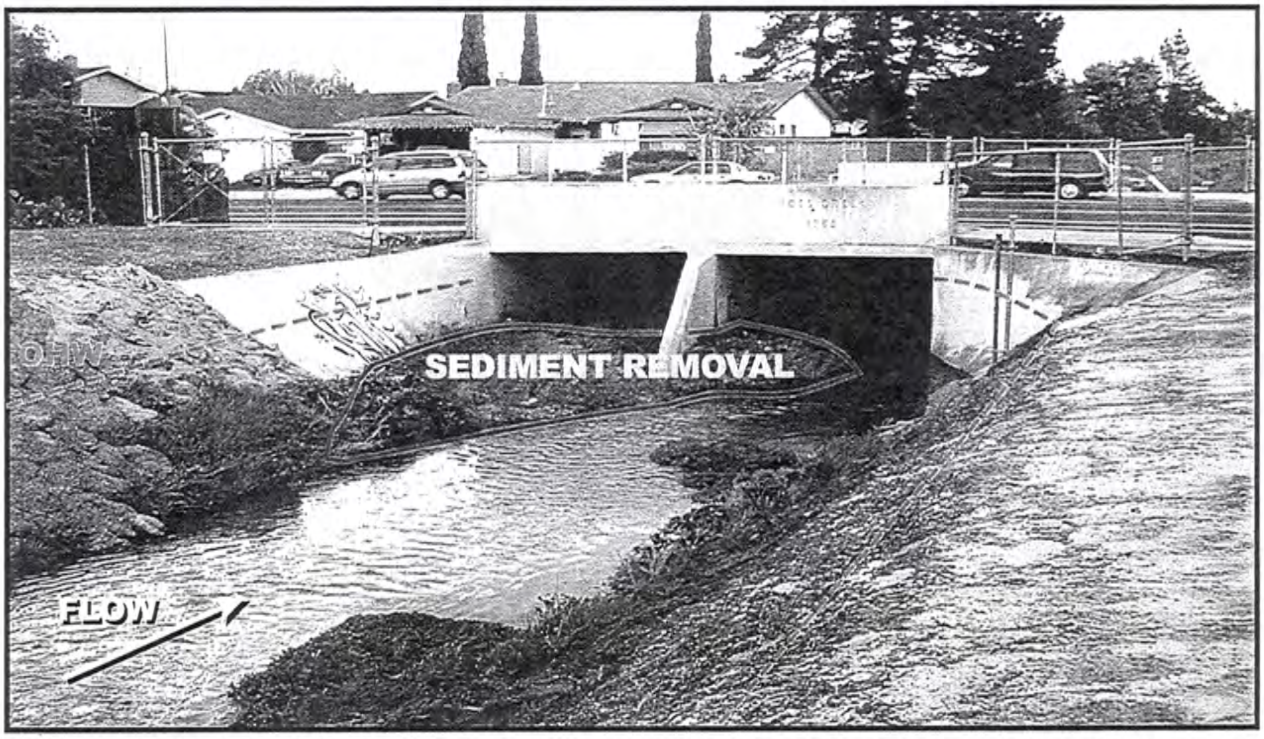
For Map, Plan, Typical Cross Section and Photos

of

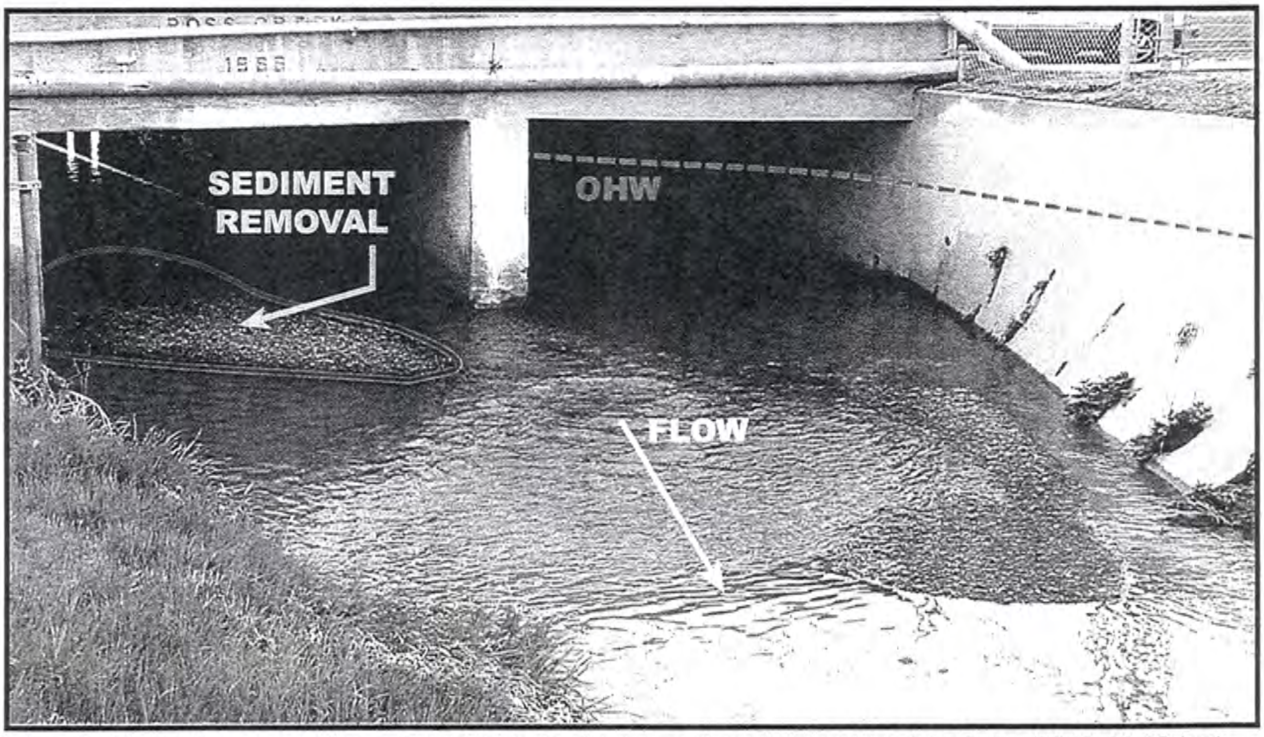
Project #16 Rucker Creek d/s of Guibal Avenue

Please refer to Appendix B, pages B39 – B42

Figure A-15d - Ross Creek upstream and downstream of Cherry Avenue

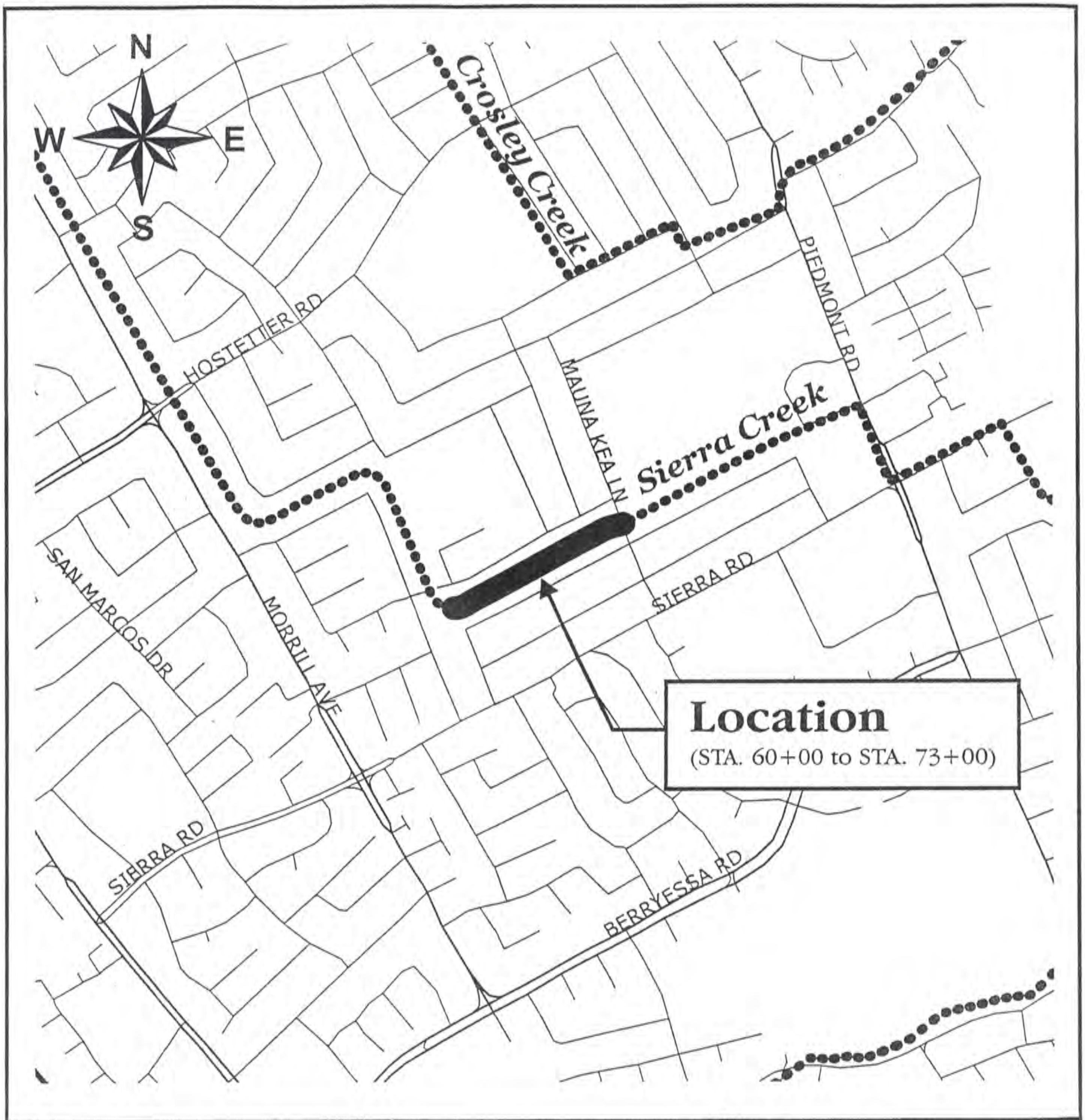


View 1 - Upstream condition of Box Culvert - chronic sediment deposition location. *(MVC-003s.jpg)*



View 2 - Downstream condition of Box Culvert - chronic sediment deposition location. *(MVC-004S.jpg)*

Figure A-17a-Vicinity Map, Sierra Creek, downstream of Mauna Kea Ln.



Location
(STA. 60+00 to STA. 73+00)

PURPOSE: To remove sediment from flood control channels to restore capacity.

VICINITY MAP

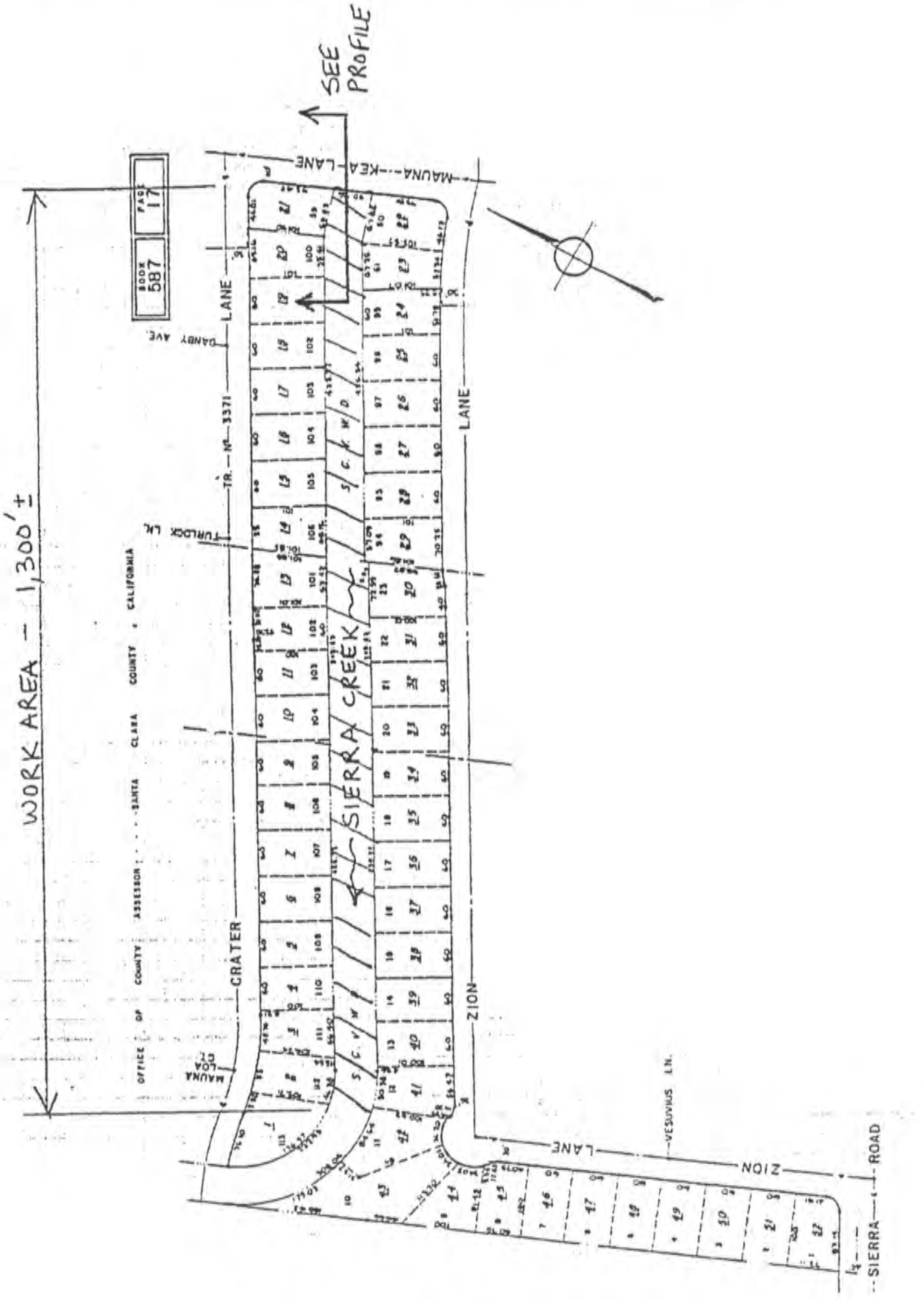
500 0 500 1000 Feet

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:
Sierra Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure A-17b-Plan View, Sierra Creek, downstream of Mauna Kea Ln.



PURPOSE: To remove sediment from flood control channels to restore capacity.

PLAN VIEW

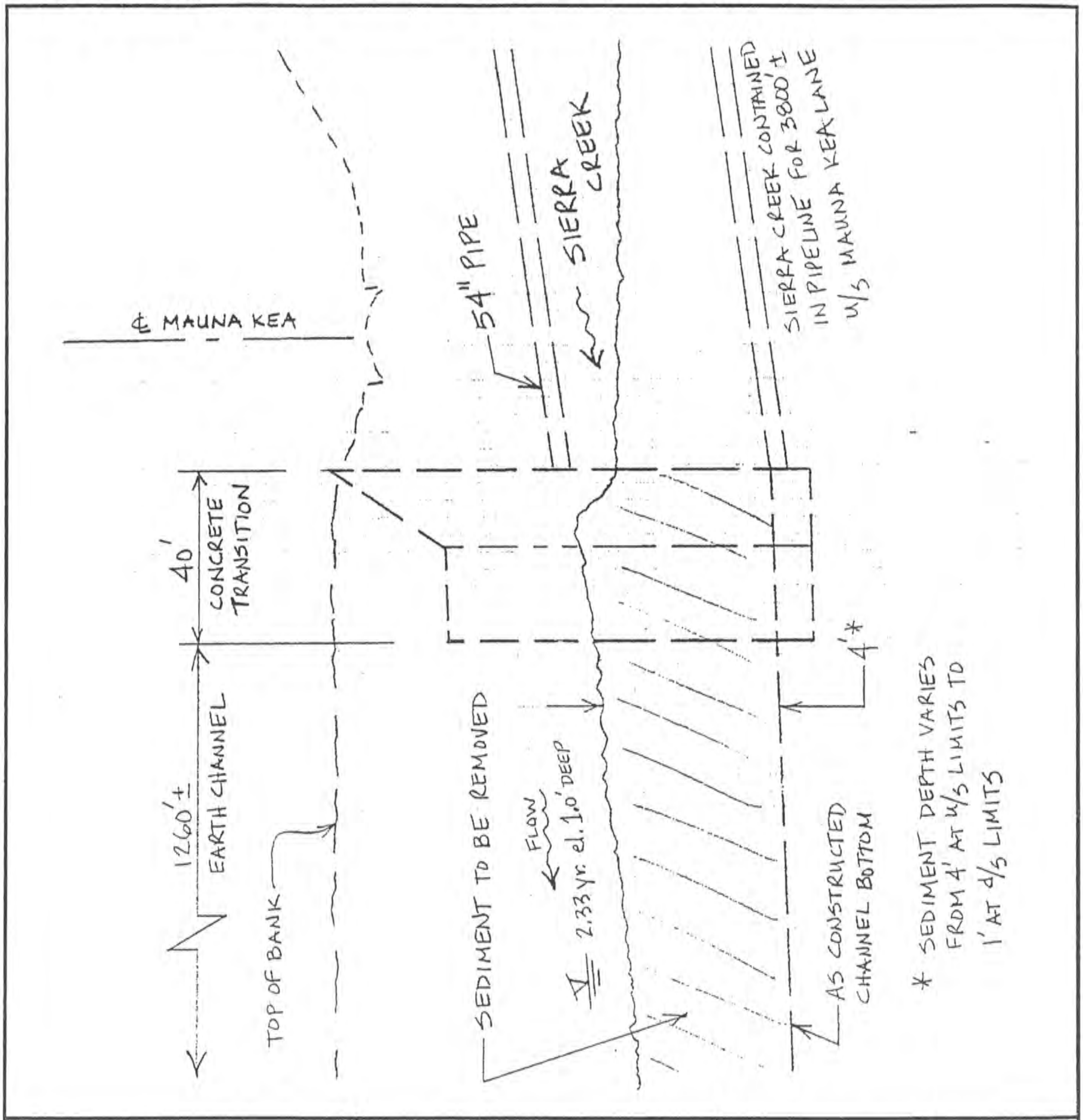
Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:
Sierra Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure A-17c-Typical Section, Sierra Creek, downstream of Mauna Kea Ln.


℄ MAUNA KEA
54" PIPE
SIERRA CREEK
SIERRA CREEK CONTAINED IN PIPELINE FOR 3800'± U/S MAUNA KEA LANE
40'
CONCRETE TRANSITION
1260'±
EARTH CHANNEL
TOP OF BANK
SEDIMENT TO BE REMOVED
FLOW
2.33 yr. el. 1.0' DEEP
4'*
AS CONSTRUCTED CHANNEL BOTTOM
* SEDIMENT DEPTH VARIES FROM 4' AT U/S LIMITS TO 1' AT D/S LIMITS

PURPOSE: To remove sediment from flood control channels to restore capacity.

TYPICAL SECTION

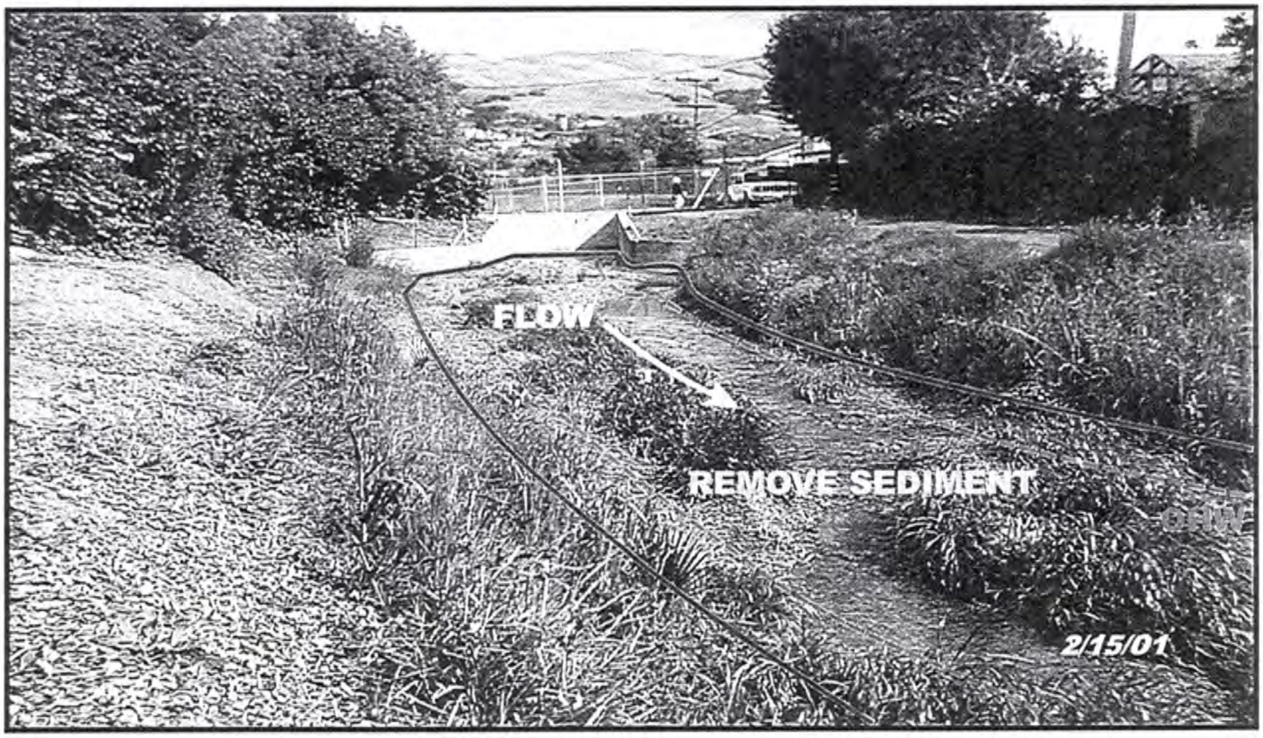
Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED SEDIMENT REMOVAL IN:
Sierra Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

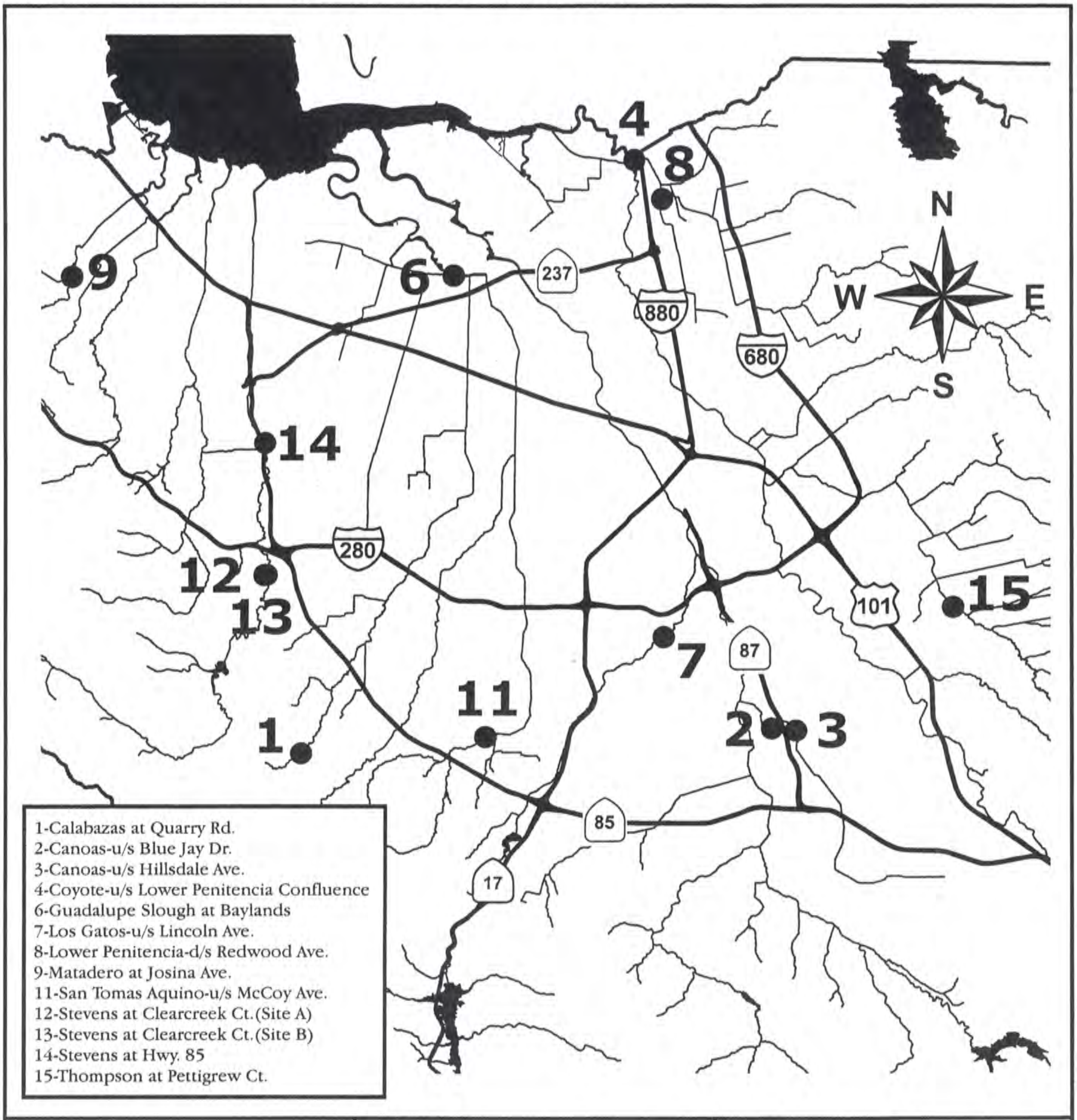
04/27/2001 11:00 a.m.

Figure A-17d - Sierra Creek - downstream of Mauna Kea



View 1 - Looking upstream towards Mauna Kea Lane at sediment removal area *(Sierra20.jpg)*

Vicinity Map for Bank Protection Projects-North County



1-Calabazas at Quarry Rd.
2-Canoas-u/s Blue Jay Dr.
3-Canoas-u/s Hillsdale Ave.
4-Coyote-u/s Lower Penitencia Confluence
6-Guadalupe Slough at Baylands
7-Los Gatos-u/s Lincoln Ave.
8-Lower Penitencia-d/s Redwood Ave.
9-Matadero at Josina Ave.
11-San Tomas Aquino-u/s McCoy Ave.
12-Stevens at Clearcreek Ct.(Site A)
13-Stevens at Clearcreek Ct.(Site B)
14-Stevens at Hwy. 85
15-Thompson at Pettigrew Ct.

PURPOSE: To repair bank erosion in creek channels.

VICINITY MAP

8000 0 8000 16,000 Feet

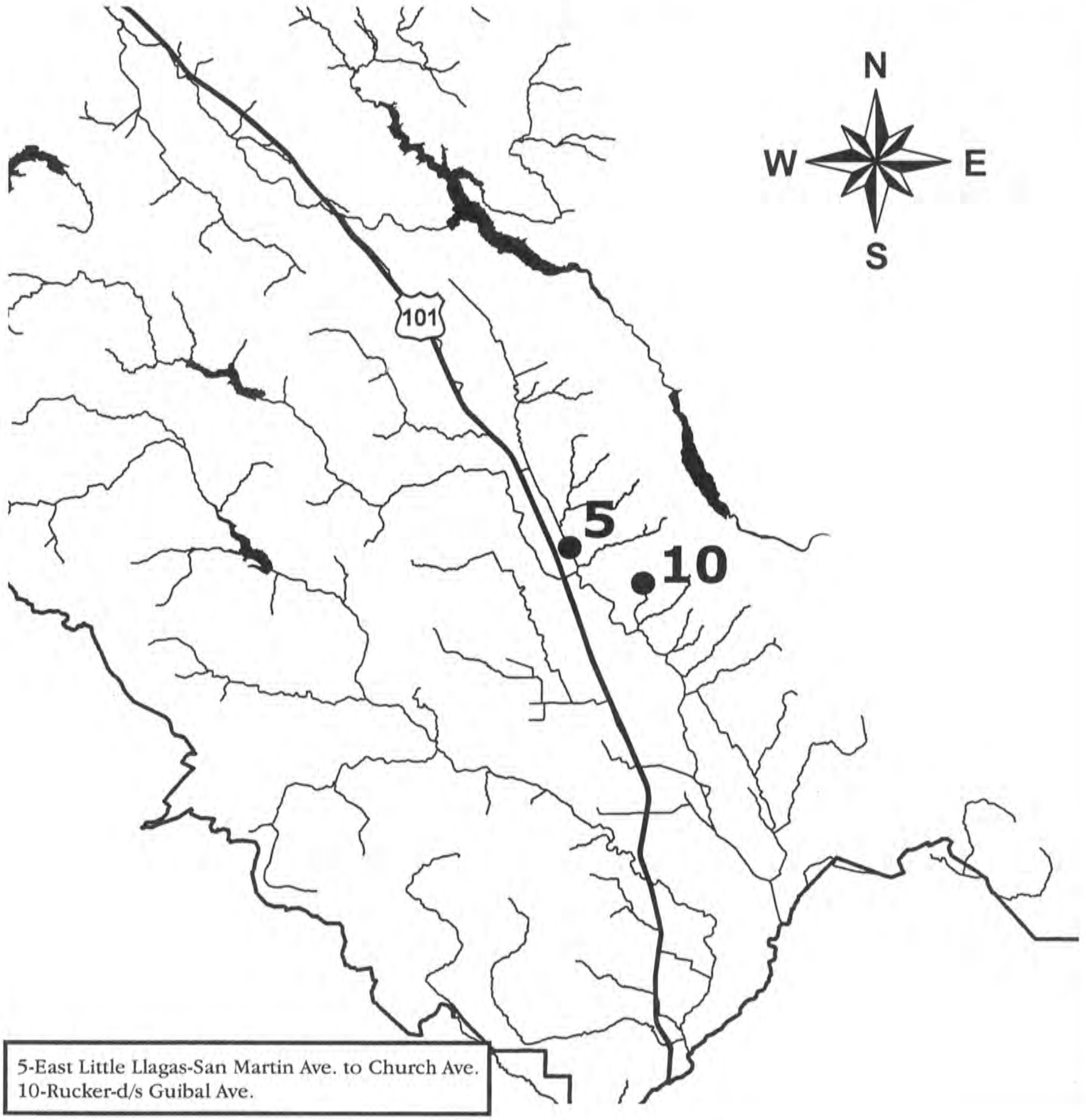
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED BANK PROTECTION IN:

COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley
Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Vicinity Map for Bank Protection Projects-South County



5-East Little Llagas-San Martin Ave. to Church Ave.
10-Rucker-d/s Guibal Ave.

PURPOSE: To repair bank erosion in creek channels.

VICINITY MAP

8000 0 8000 16,000 Feet

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED BANK PROTECTION IN:

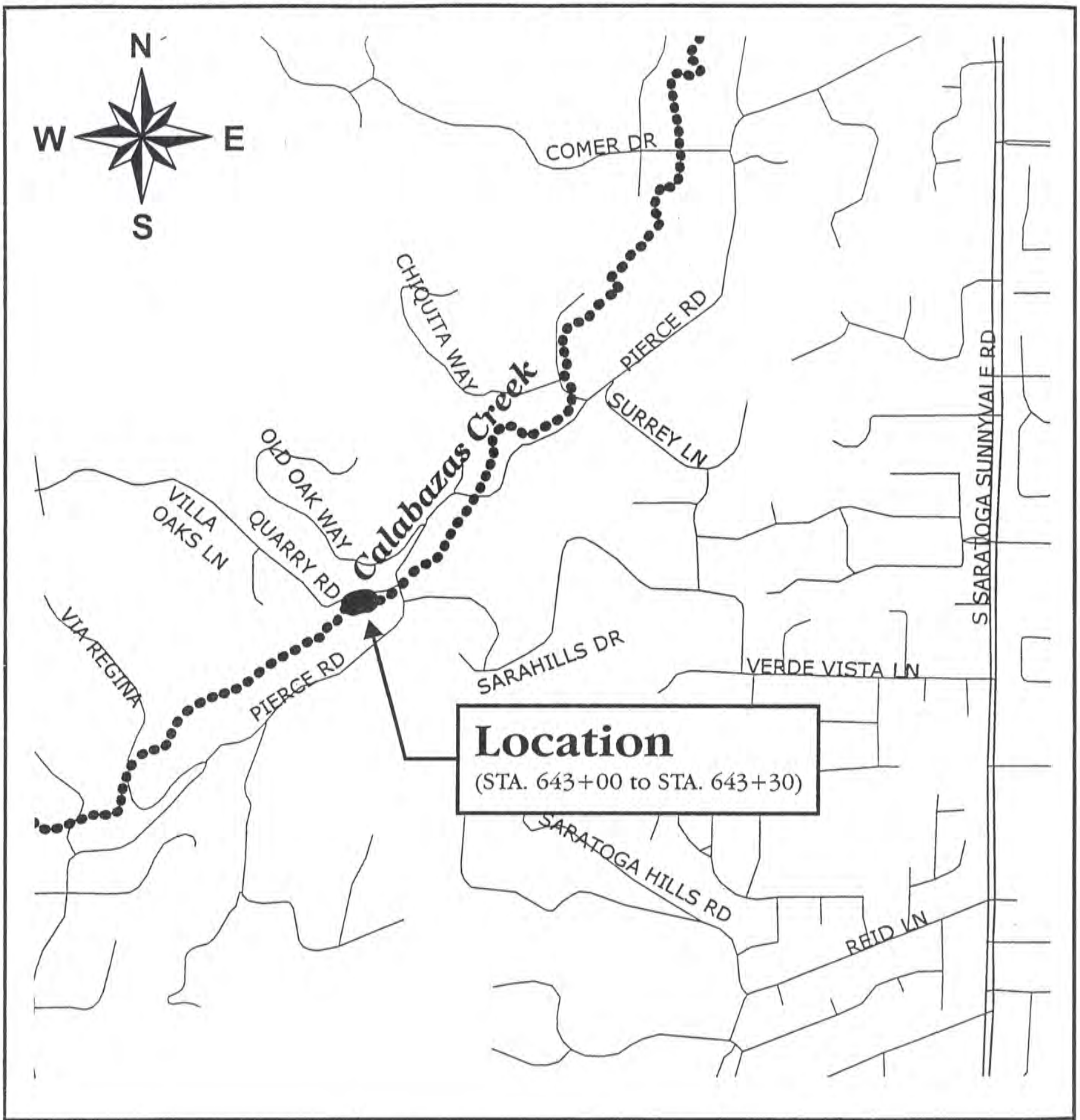
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley
Water District
DATE: May 2001

04/27/2001 11:00 a.m.

APPENDIX B

BANK PROTECTION: VICINITY AND PLAN VIEW MAPS AND TYPICAL PLAN OR CROSS-SECTIONS AND PHOTOS

Figure B-1a-Vicinity Map, Calabazas Creek, at Quarry Rd.



Location

(STA. 643+00 to STA. 643+30)

PURPOSE: To repair bank erosion in creek channels.

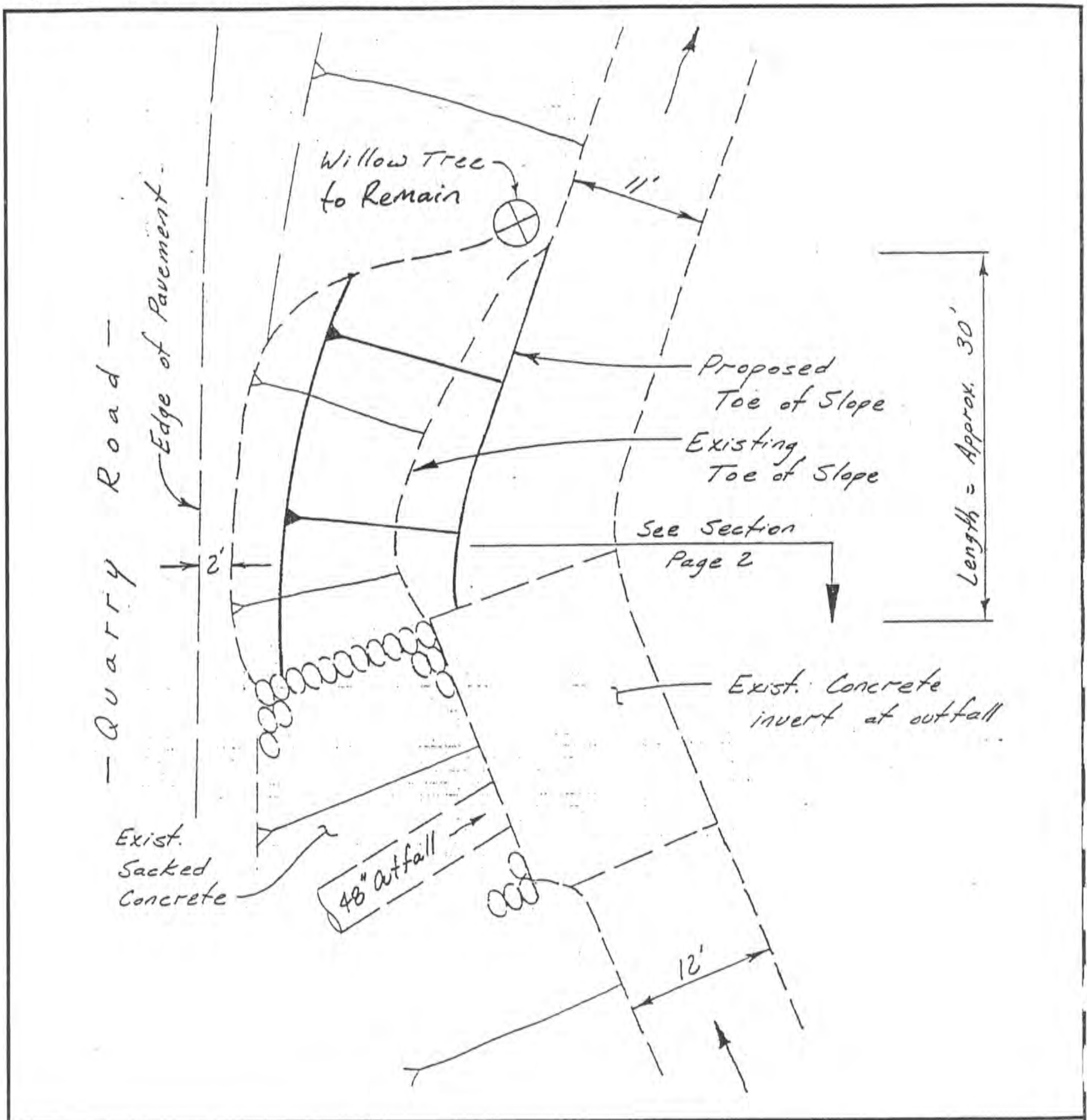
VICINITY MAP

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED BANK PROTECTION IN:
Calabazas Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure B-1b-Plan View, Calabazas Creek, at Quarry Rd.



PURPOSE: To repair bank erosion in creek channels.

PLAN VIEW

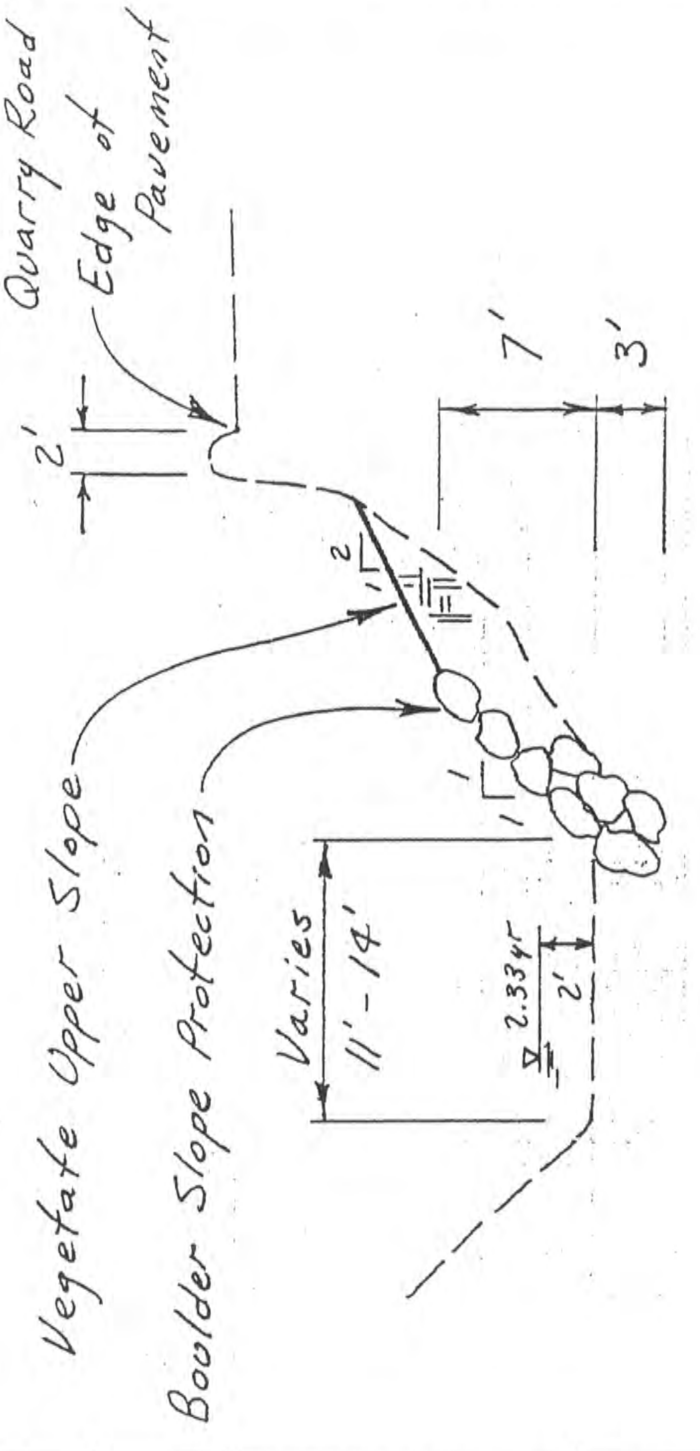
Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED BANK PROTECTION IN:
Calabazas Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure B-1c-Typical Section, Calabazas Creek, at Quarry Rd.



PURPOSE: To repair bank erosion in creek channels.

TYPICAL SECTION

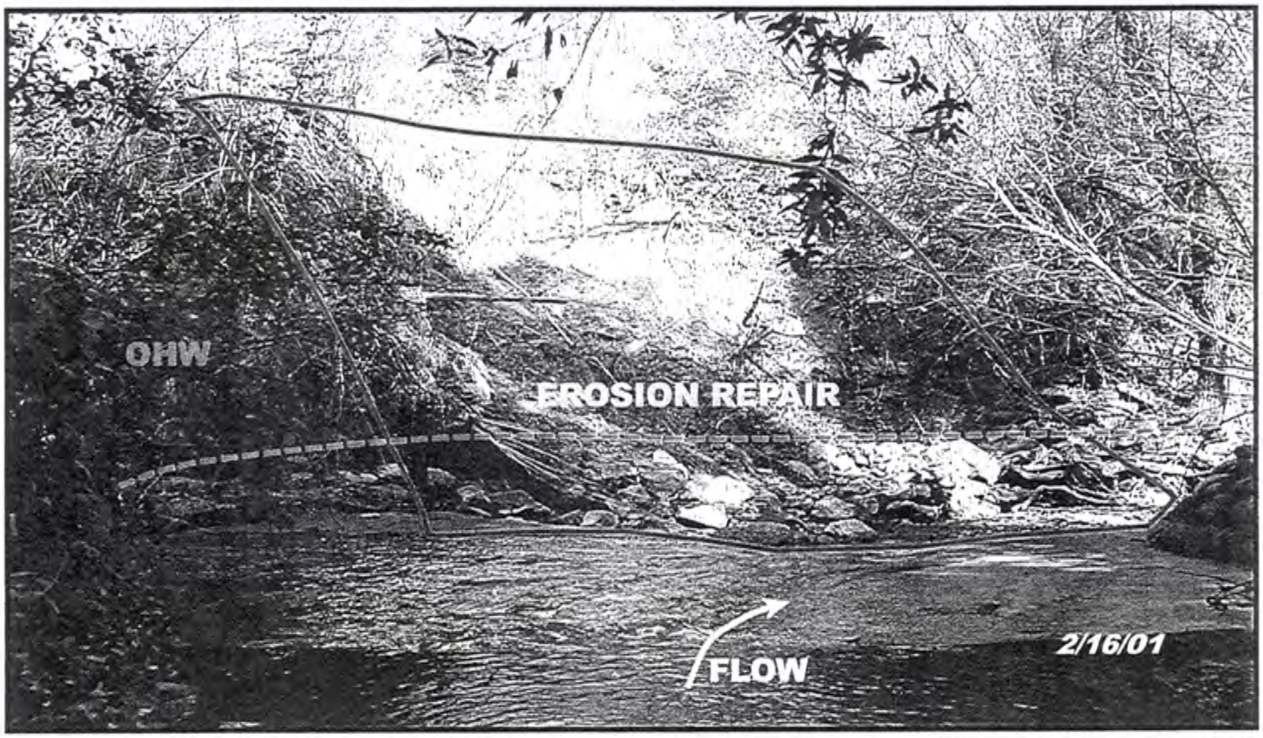
Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

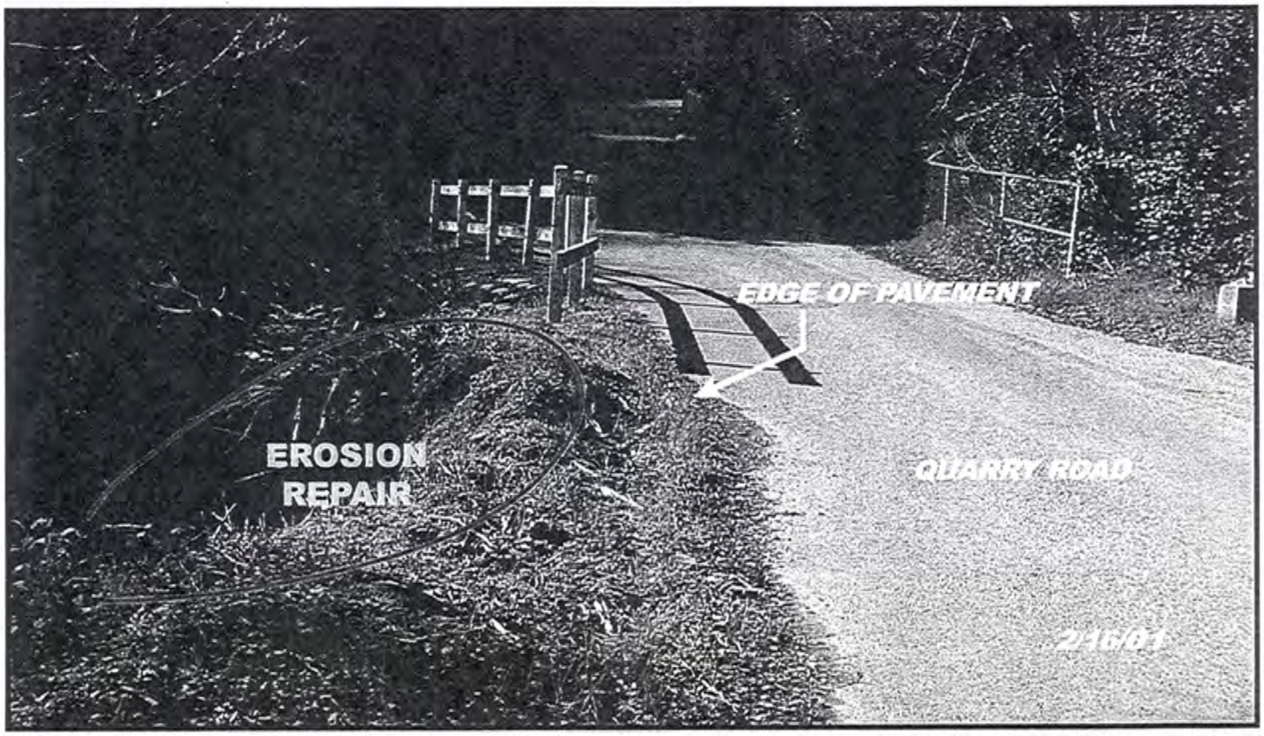
PROPOSED BANK PROTECTION IN:
Calabazas Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure B-1d - Calabazas Creek at Quarry Road.

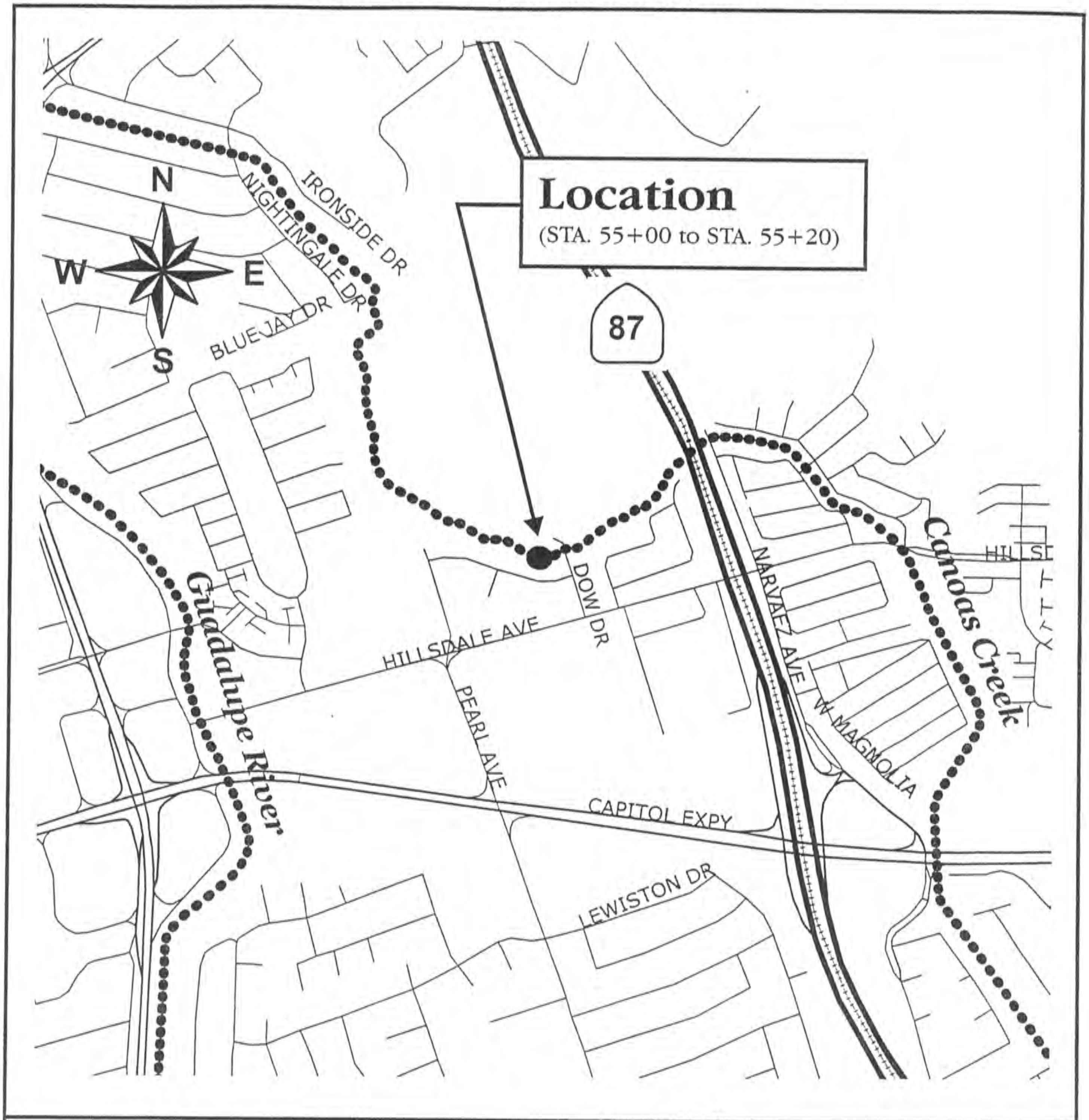


View 1 - Looking downstream at project area. Note concrete channel invert located at 48-inch storm drain outfall, immediately upstream of erosion site. *(Calabazas at Quarry, View1 (Site25).jpg)*



View 2 - Looking upstream along top of bank at Quarry Road. Note proximity of erosion to edge of roadway, approximately 2-feet. *(Calabazas at Quarry, View2 (Site25).jpg)*

Figure B-2a-Vicinity Map, Canoas Creek, upstream of Blue Jay Dr.



PURPOSE: To repair bank erosion in creek channels.

VICINITY MAP

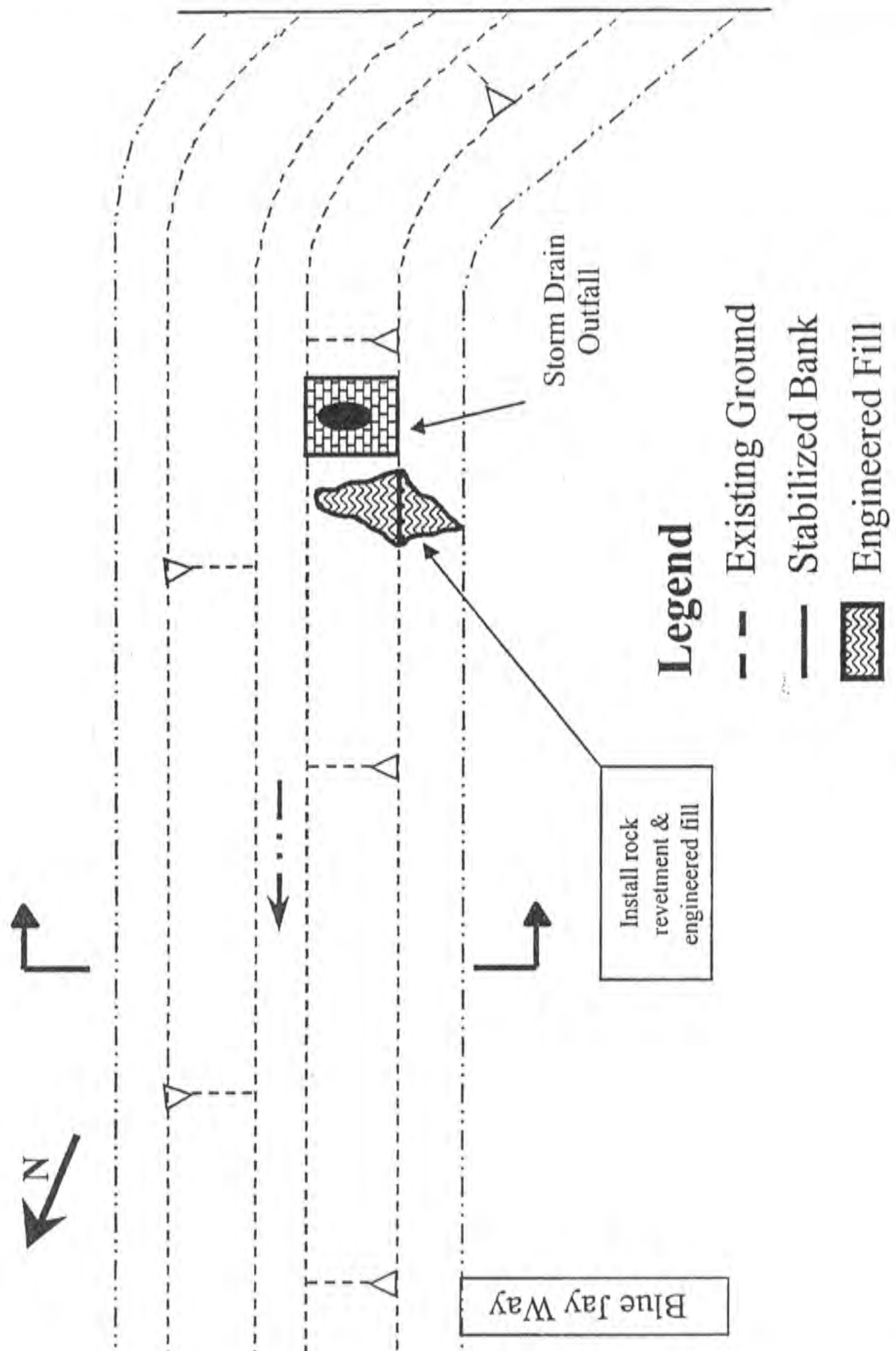
500 0 500 1000 Feet

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED BANK PROTECTION IN:
Canoas Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley
Water District
DATE: May 2001

04/27/2001 11:00 a.m.

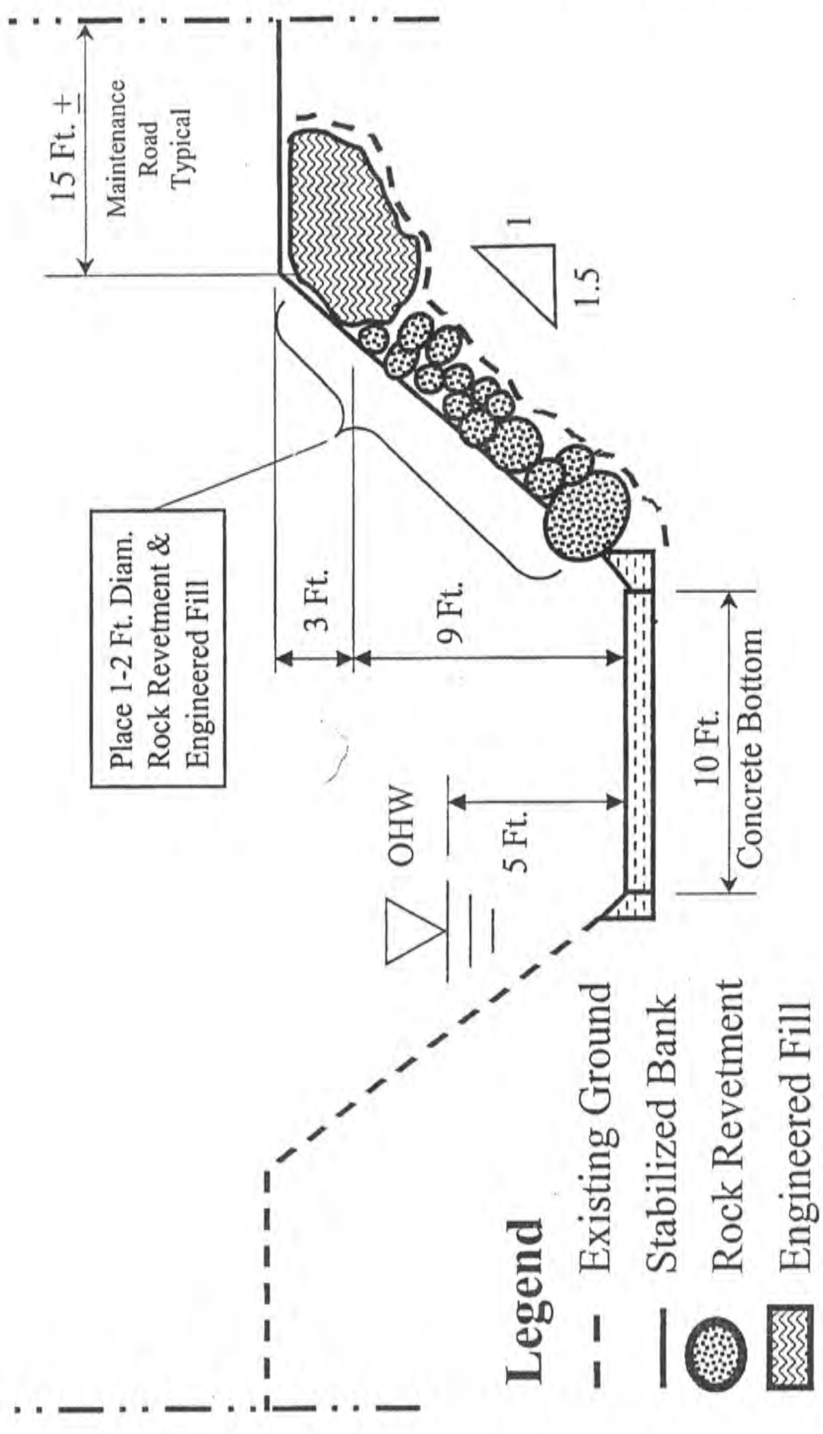
Figure B-2b-Plan View, Canoas Creek, upstream of Blue Jay Dr.



PURPOSE: To repair bank erosion in creek channels.	**PLAN VIEW** Not to scale Santa Clara Valley Water District 5750 Almaden Expressway San Jose, California 95118 www.scvwd.dst.ca.us	***PROPOSED BANK PROTECTION IN:*** Canoas Creek ***COUNTY OF:*** Santa Clara ***APPLICATION BY:*** Santa Clara Valley Water District ***DATE:*** May 2001

04/27/2001 11:00 a.m.

Figure B-2c-Typical Section, Canoas Creek, upstream of Blue Jay Dr.



PURPOSE: To repair bank erosion in creek channels.

TYPICAL SECTION

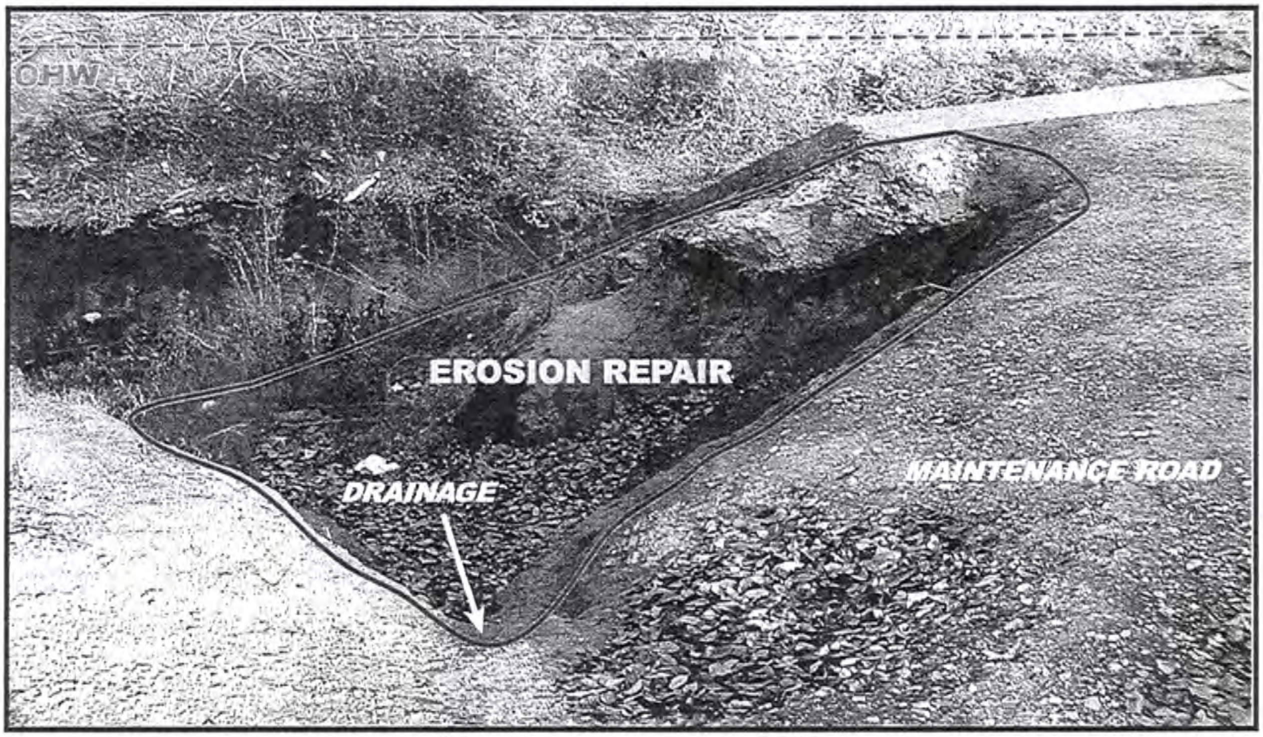
Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED BANK PROTECTION IN:
Canoas Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley
Water District
DATE: May 2001

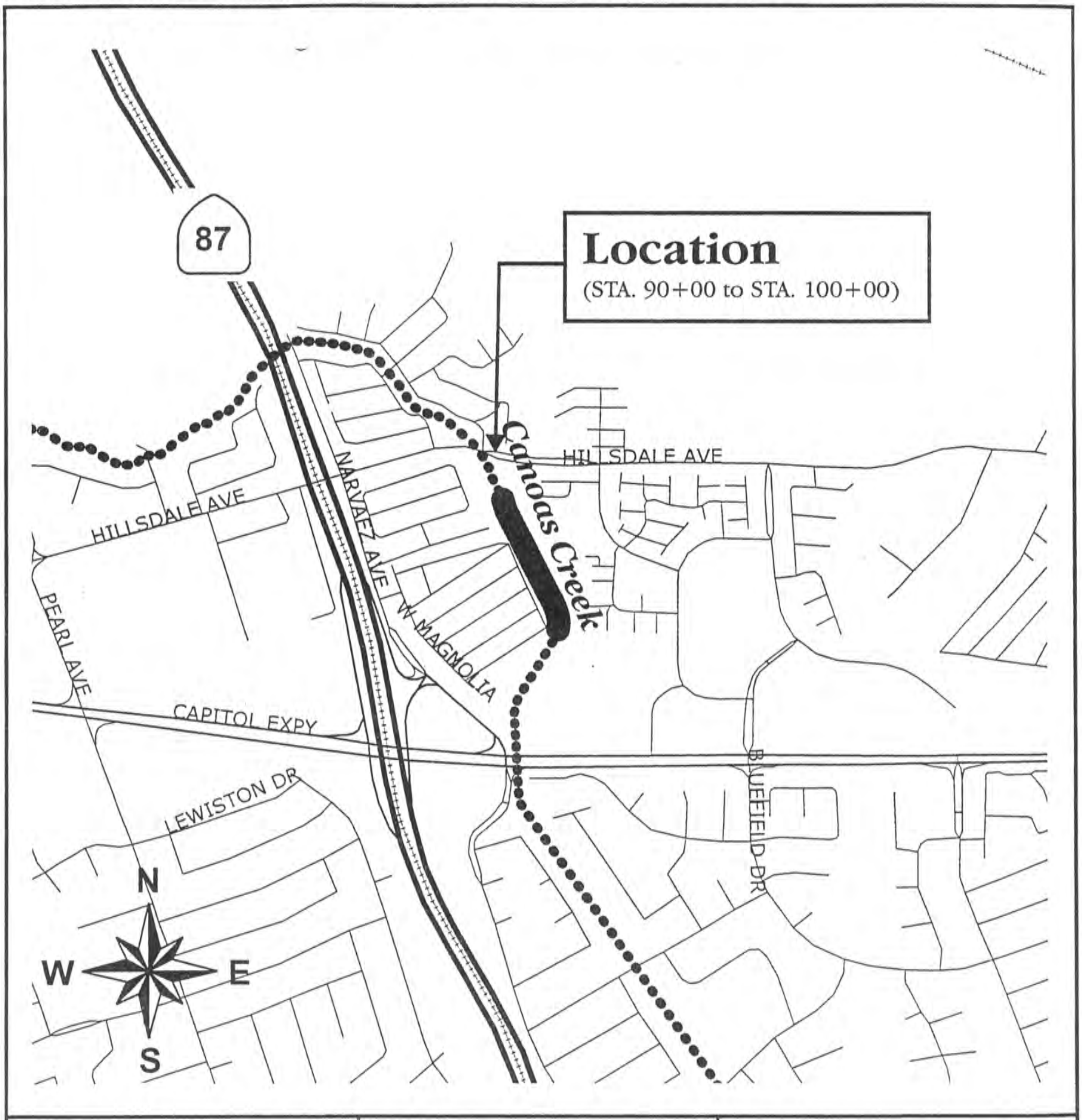
04/27/2001 11:00 a.m.

Figure B-2d - Canoas Creek downstream of Dow Drive



View 1 - Road and bank damage caused by overbank drainage. *(MVC 002s.jpg)*

Figure B-3a-Vicinity Map, Canoas Creek, upstream of Hillsdale Ave.



PURPOSE: To repair bank erosion in creek channels.

VICINITY MAP

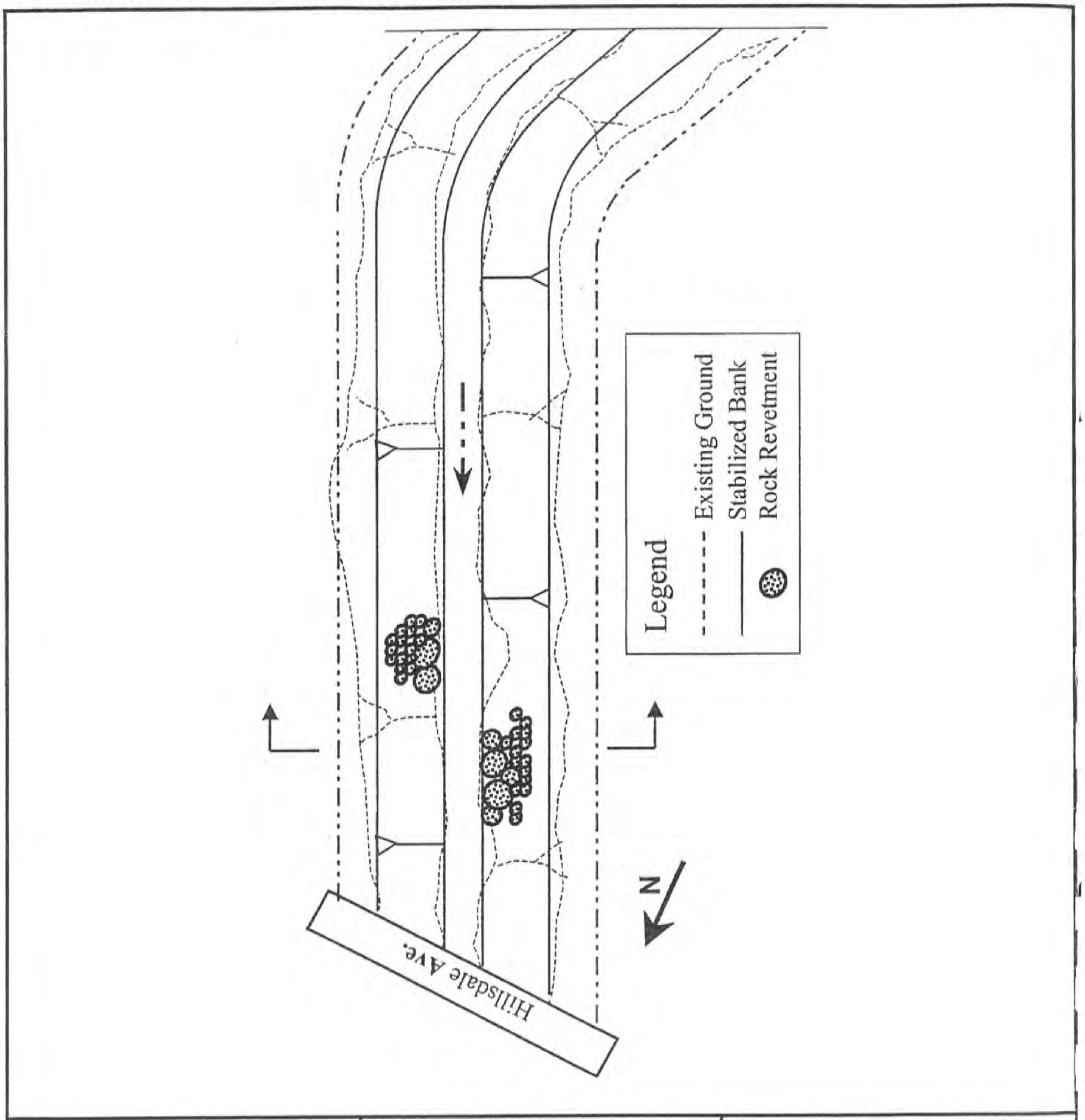
500 0 500 1000 Feet

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED BANK PROTECTION IN:
Canoas Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure B-3b-Plan View, Canoas Creek, upstream of Hillsdale Ave.



PURPOSE: To repair bank erosion in creek channels.

PLAN VIEW

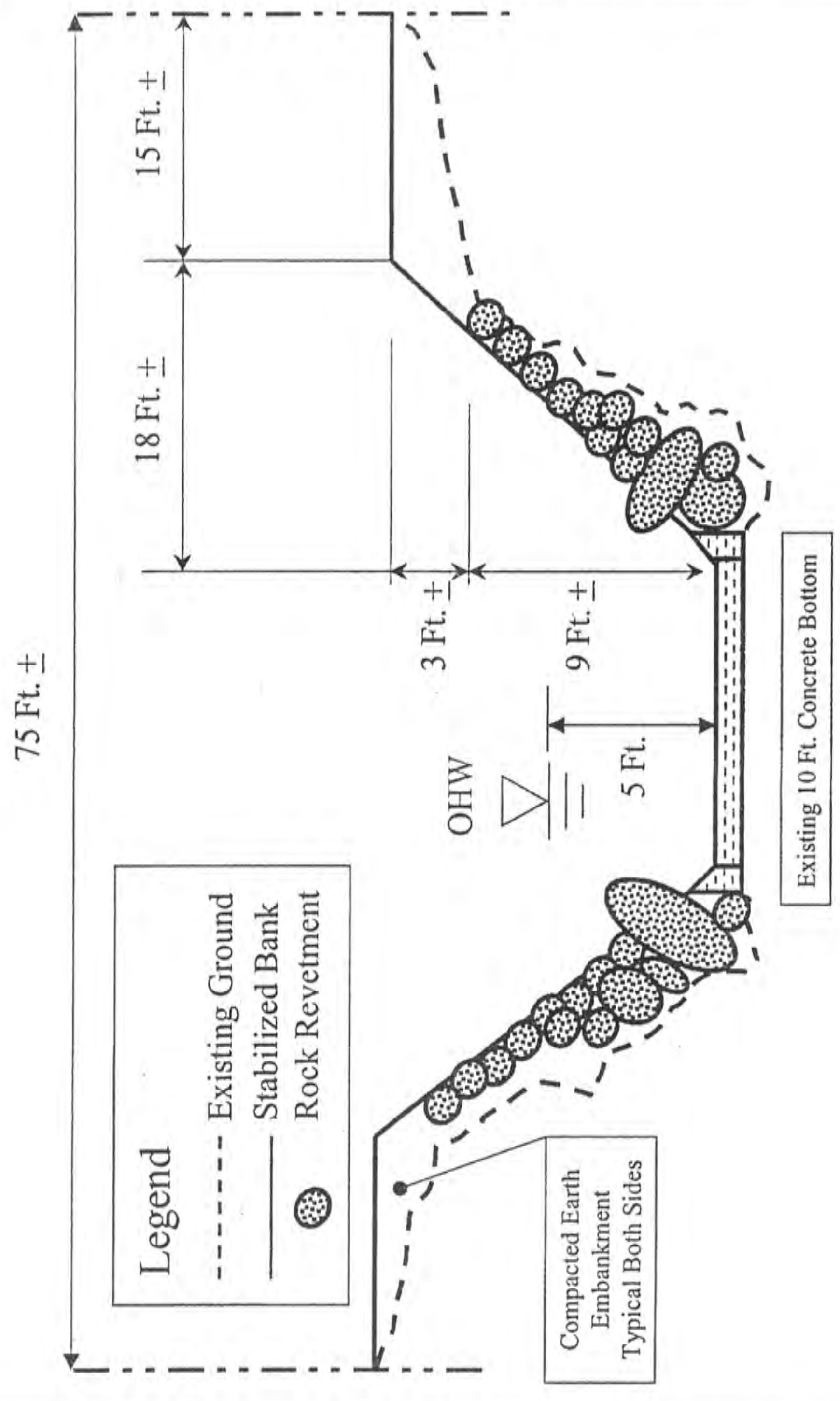
Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED BANK PROTECTION IN:
Canoas Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure B-3c-Typical Section, Canoas Creek, upstream of Hillsdale Ave.



PURPOSE: To repair bank erosion in creek channels.

TYPICAL SECTION

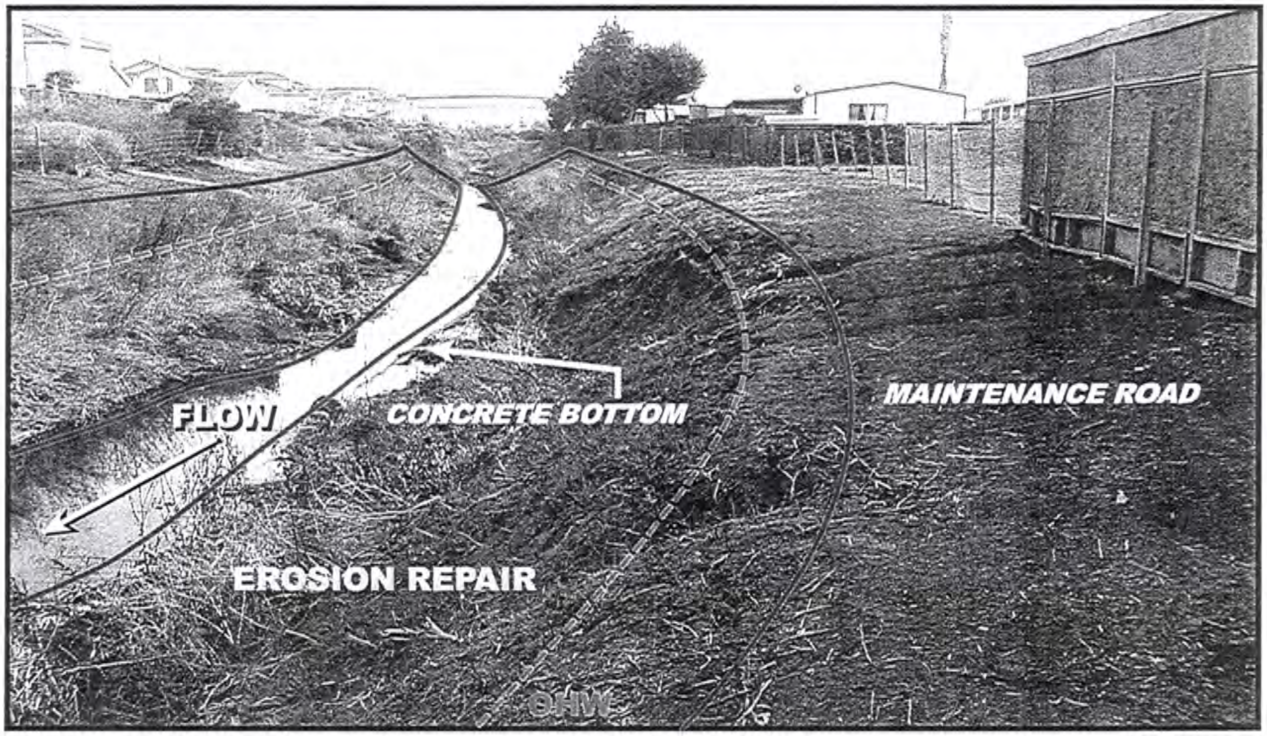
Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED BANK PROTECTION IN:
Canoas Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

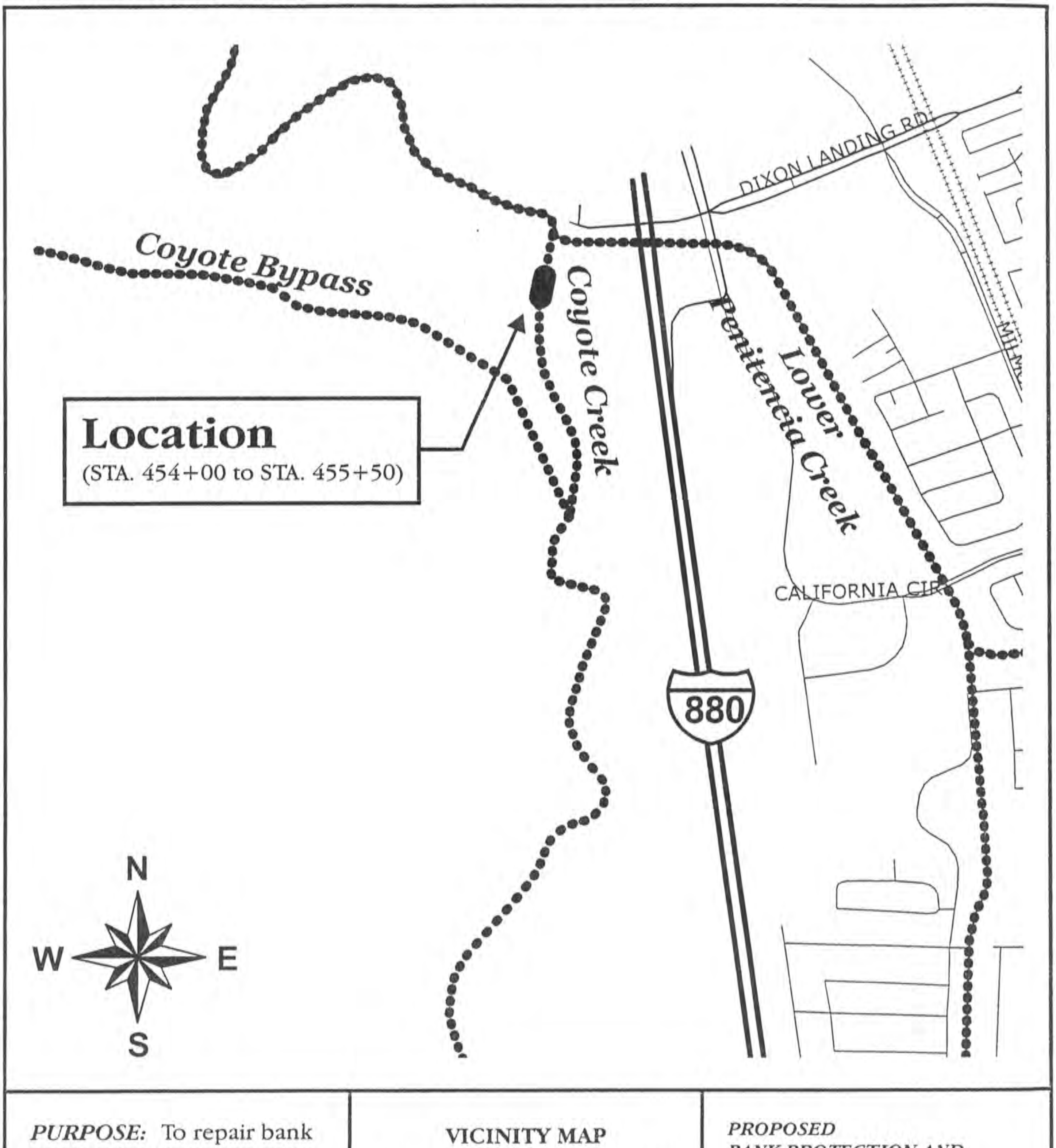
04/27/2001 11:00 a.m.

Figure B-3d - Canoas Creek upstream of Hillsdale Avenue.



View 1 - Looking upstream from west bank, 300 feet south of Hillsdale Avenue. Note narrow sloping maintenance road, and edge of concrete bottom. *(Canoas u-s Hilsdale erosion 1.jpg)*

Figure B-4a-Vicinity Map, Coyote Creek, upstream of Lower Penitencia Confluence



PURPOSE: To repair bank erosion in creek channels and to remove sediment from flood control channels to restore capacity.

VICINITY MAP

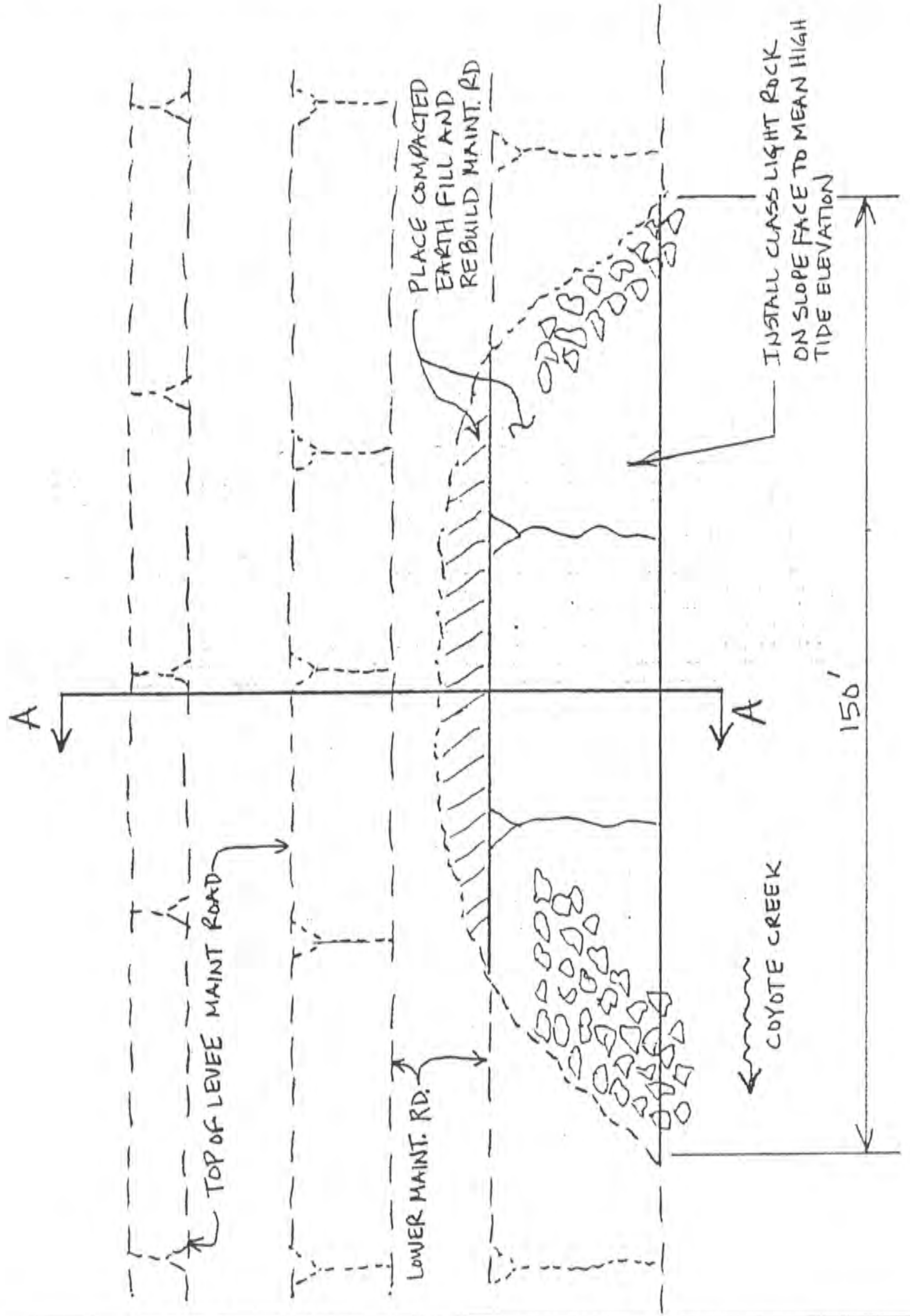
500 0 500 1000 Feet

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED BANK PROTECTION AND SEDIMENT REMOVAL IN:
Coyote Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley
Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure B-4b-Plan View, Coyote Creek, upstream of Lower Penitencia Confluence


PLACE COMPACTED EARTH FILL AND REBUILD MAINT. RD
INSTALL CLASS LIGHT ROCK ON SLOPE FACE TO MEAN HIGH TIDE ELEVATION
A
A
150'
TOP OF LEVEE MAINT ROAD
LOWER MAINT. RD.
COYOTE CREEK

PURPOSE: To repair bank erosion in creek channels and to remove sediment from flood control channels to restore capacity.

PLAN VIEW

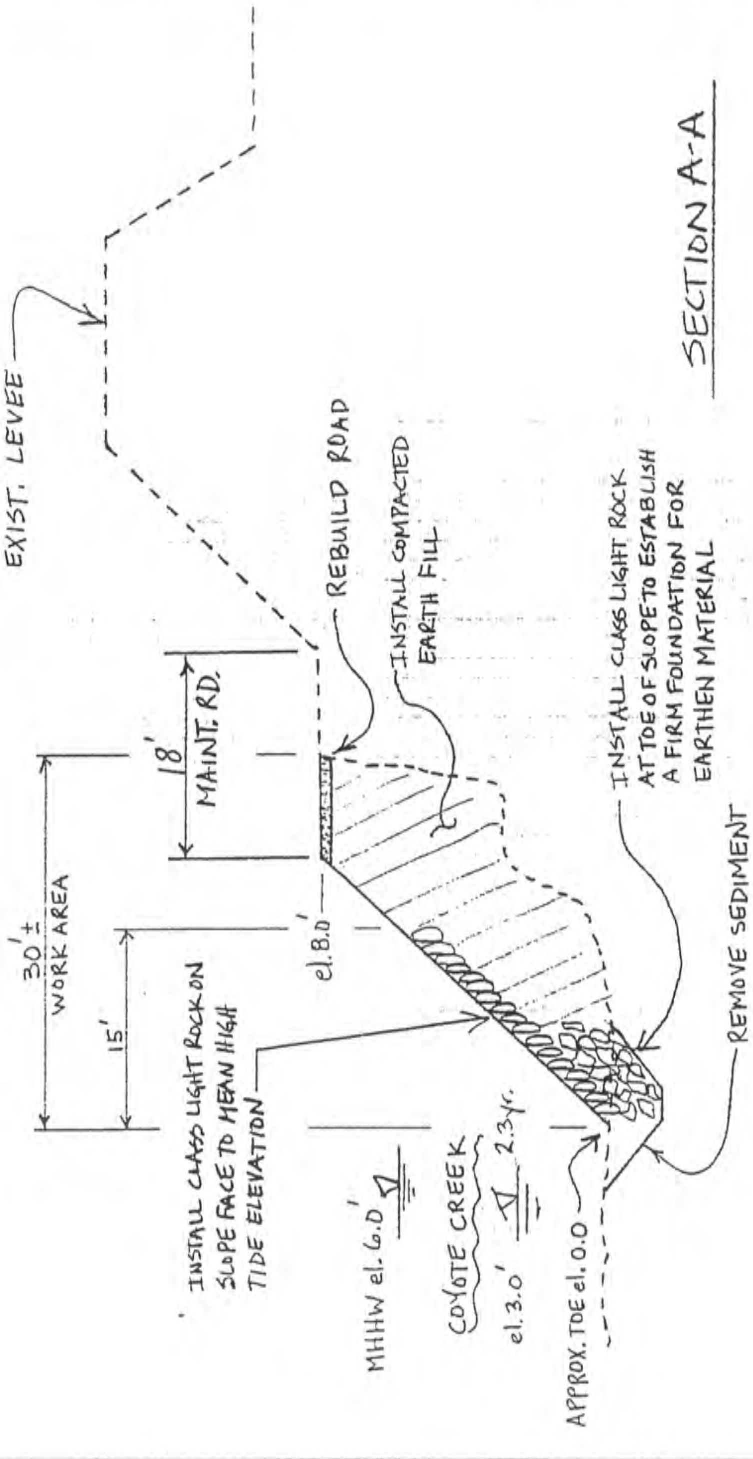
Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED BANK PROTECTION AND SEDIMENT REMOVAL IN:
Coyote Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure B-4c-Typical Section, Coyote Creek, upstream of Lower Penitencia Confluence


SECTION A-A
EXIST. LEVEE
REBUILD ROAD
INSTALL COMPACTED EARTH FILL
INSTALL CLASS LIGHT ROCK AT TOE OF SLOPE TO ESTABLISH A FIRM FOUNDATION FOR EARTHEN MATERIAL
REMOVE SEDIMENT AND UNSUITABLE MATERIAL
18'
MAINT. RD.
30' ±
WORK AREA
15'
el. 8.0'
INSTALL CLASS LIGHT ROCK ON SLOPE FACE TO MEAN HIGH TIDE ELEVATION
MHHW el. 6.0'
COYOTE CREEK
el. 3.0'
2.3 yr.
APPROX. TOE el. 0.0

PURPOSE: To repair bank erosion in creek channels and to remove sediment from flood control channels to restore capacity.

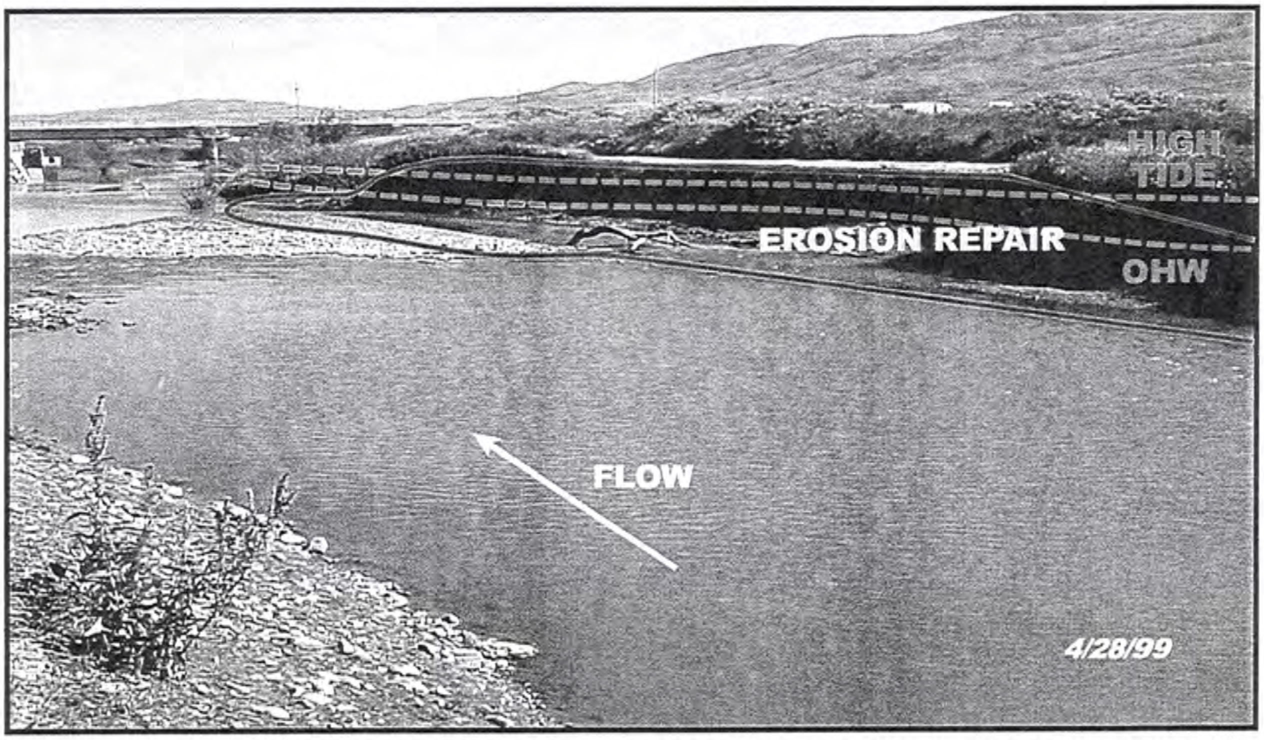
TYPICAL SECTION

Not to scale

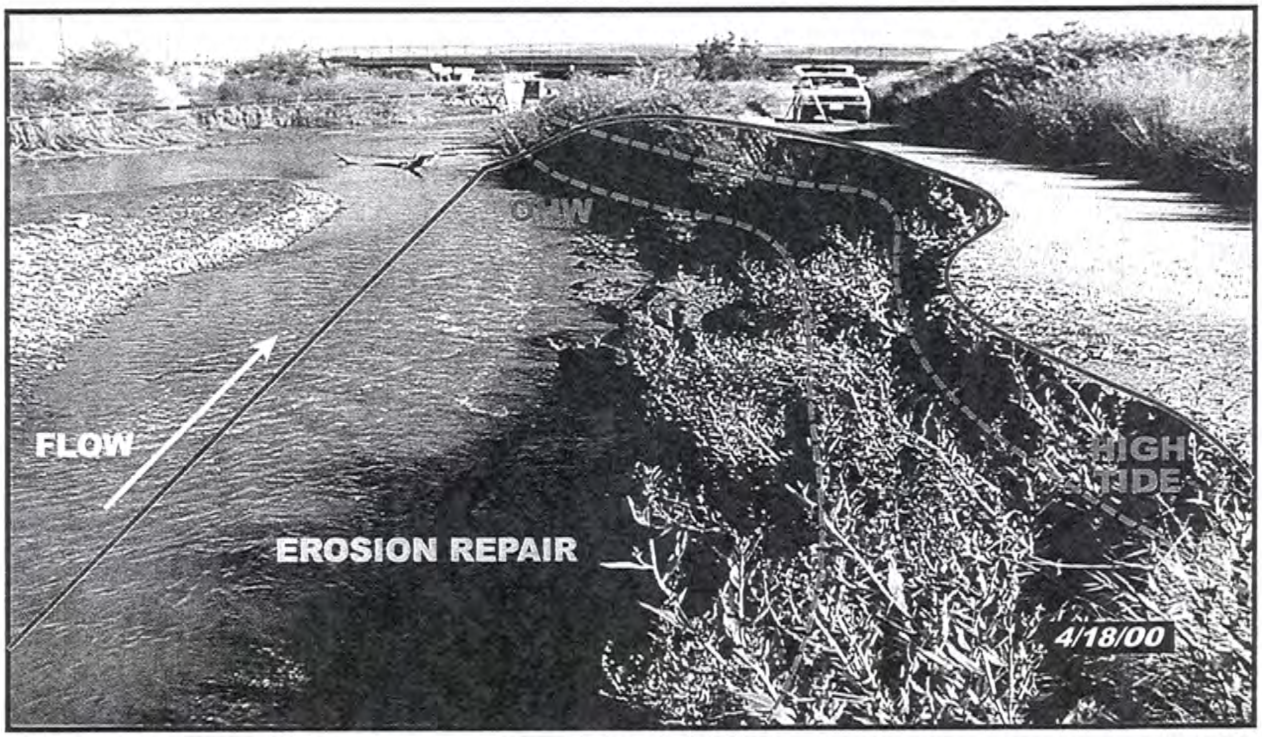
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED BANK PROTECTION AND SEDIMENT REMOVAL IN:
Coyote Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley
Water District
DATE: May 2001

Figure B-4d - Coyote Creek - upstream of Lower Penitencia Creek Confluence.

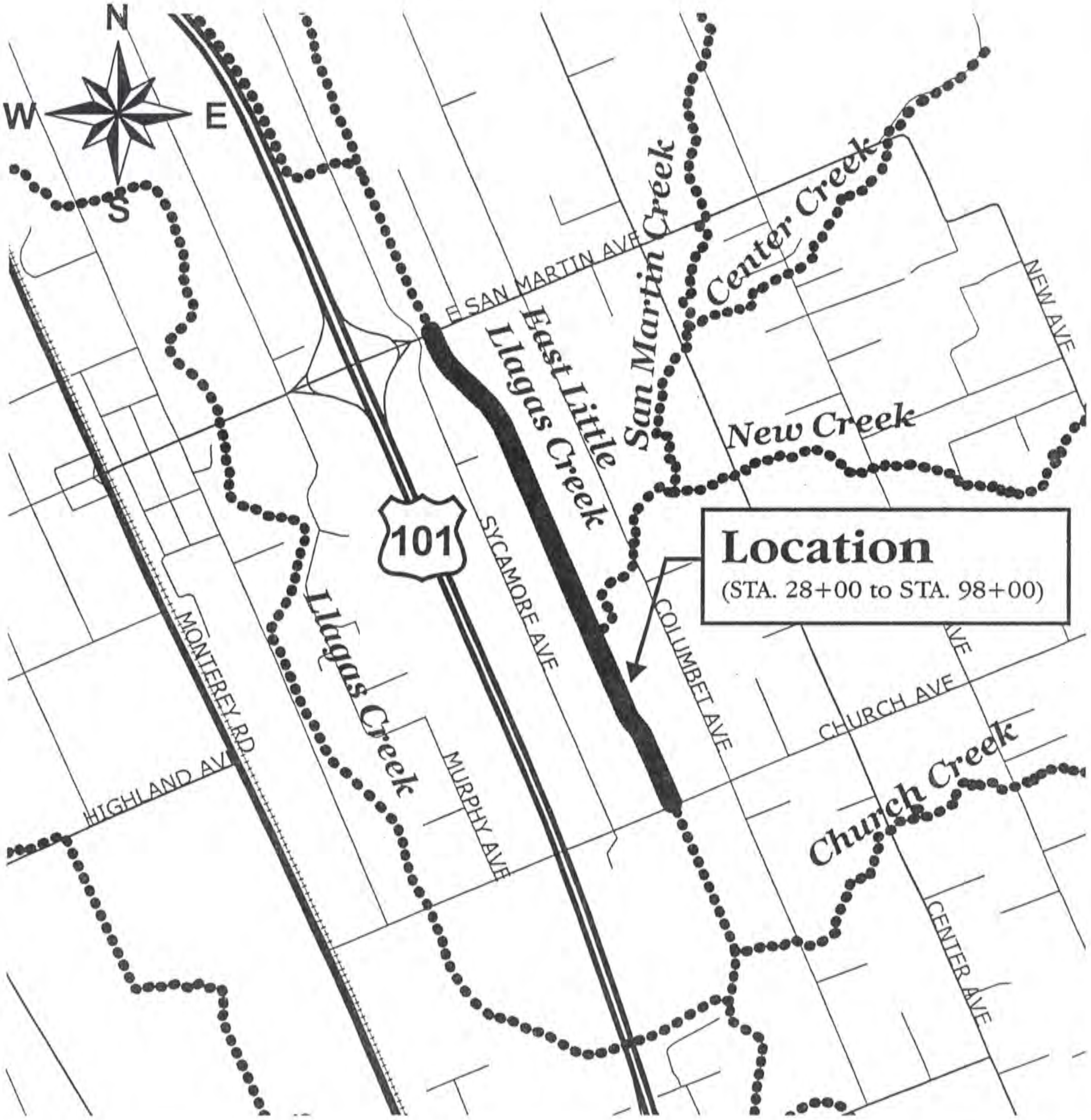


View 1 - Looking downstream towards Lower Penitencia Creek Confluence at erosion repair area. *(Coyote9.jpg)*



View 2 - Looking downstream towards lower Penitencia Creek Confluence at erosion repair area. *(Coyote9b.jpg)*

Figure B-5a-Vicinity Map, East Little Llagas Creek, San Martin Ave. to Church Ave.



Location
(STA. 28+00 to STA. 98+00)

PURPOSE: To repair bank erosion in creek channels.

VICINITY MAP

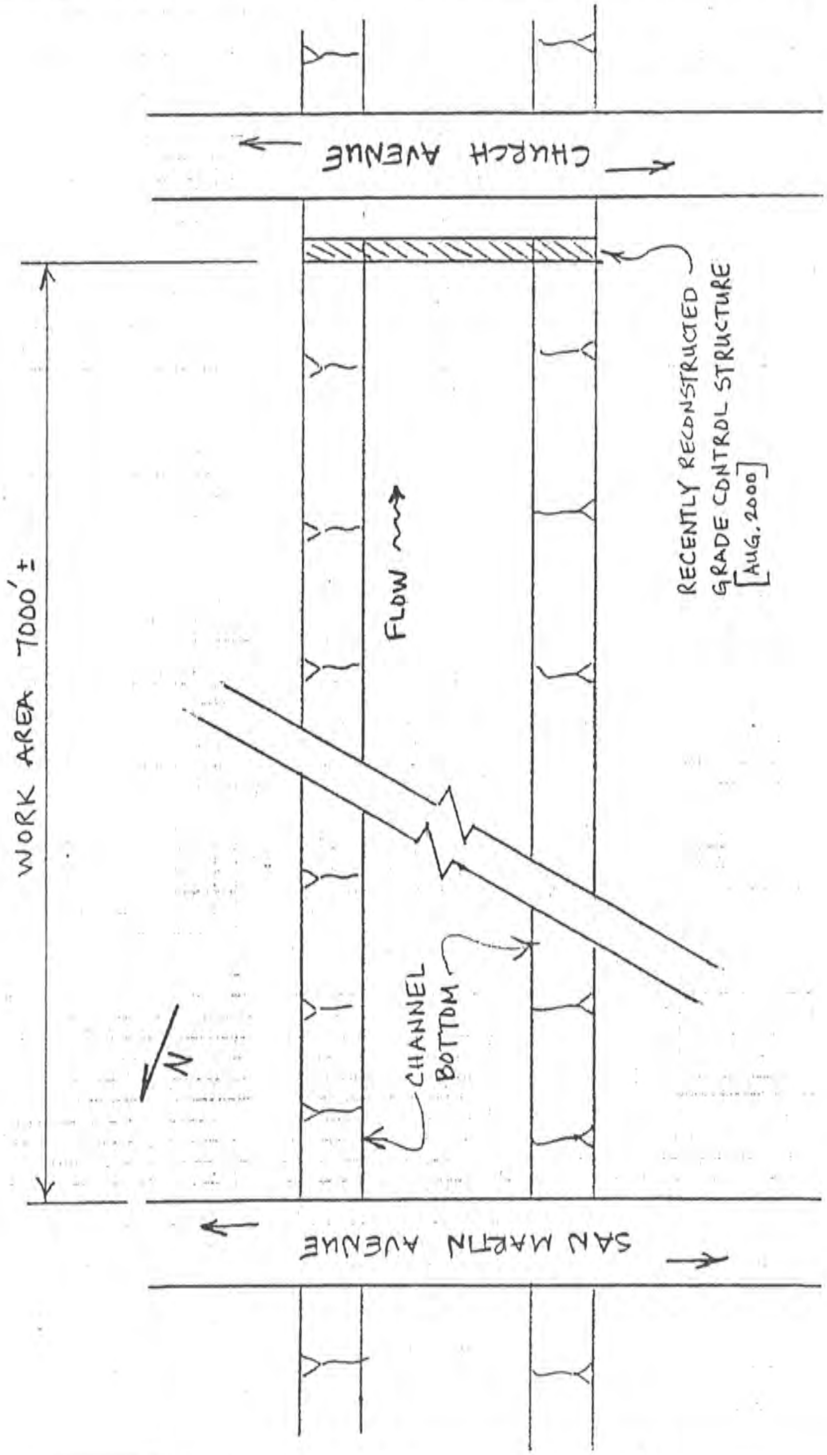
1000 0 1000 2000 Feet

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED BANK PROTECTION IN:
East Little Llagas Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure B-5b-Plan View, East Little Llagas Creek, San Martin Ave. to Church Ave.



PURPOSE: To repair bank erosion in creek channels.

PLAN VIEW

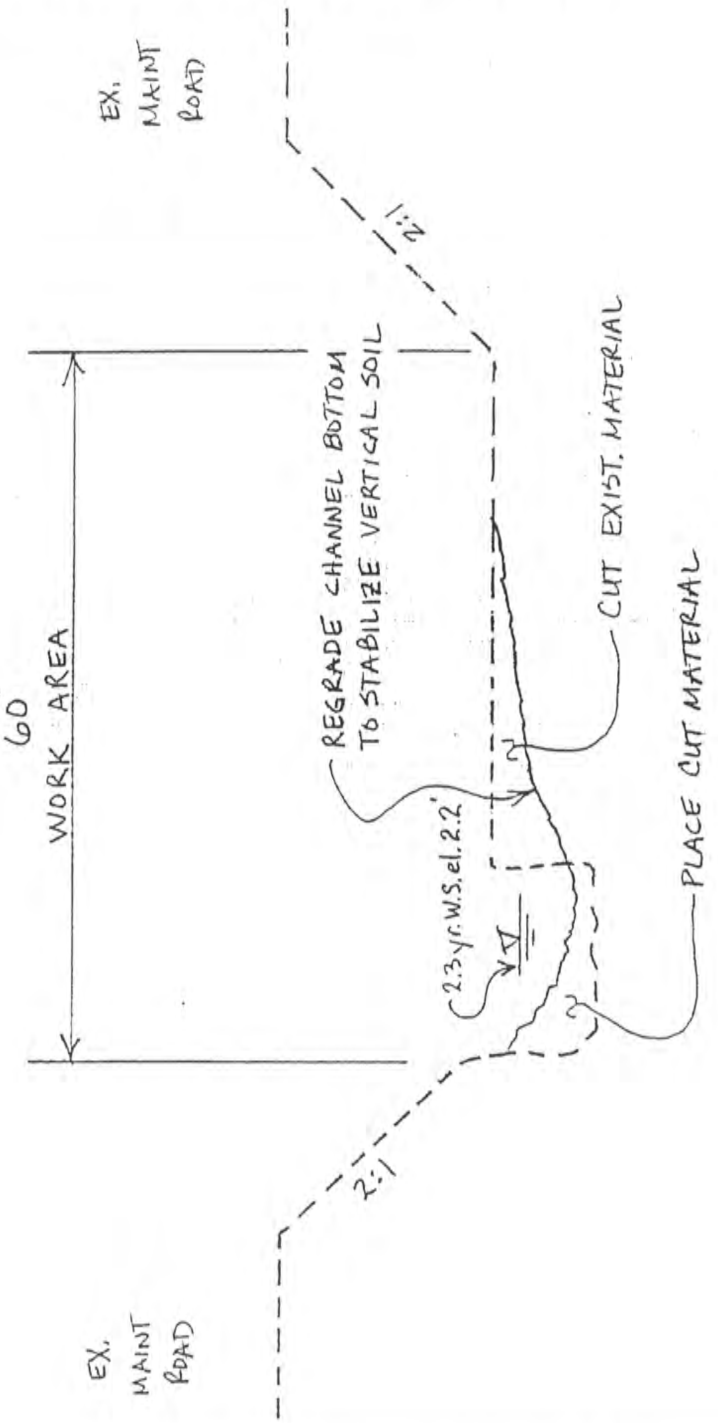
Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED BANK PROTECTION IN:
East Little Llagas Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure B-5c-Typical Section, East Little Llagas Creek, San Martin Ave. to Church Ave.



PURPOSE: To repair bank erosion in creek channels.

TYPICAL SECTION

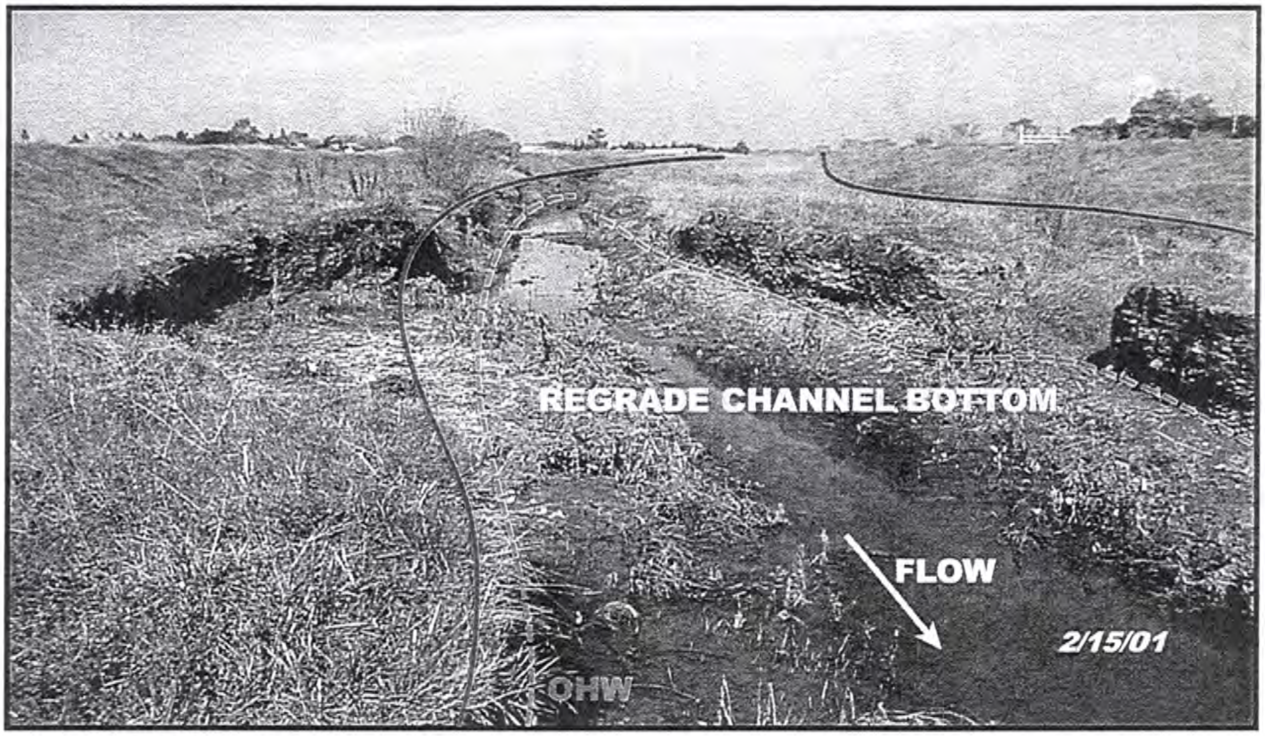
Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED BANK PROTECTION IN:
East Little Llagas Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

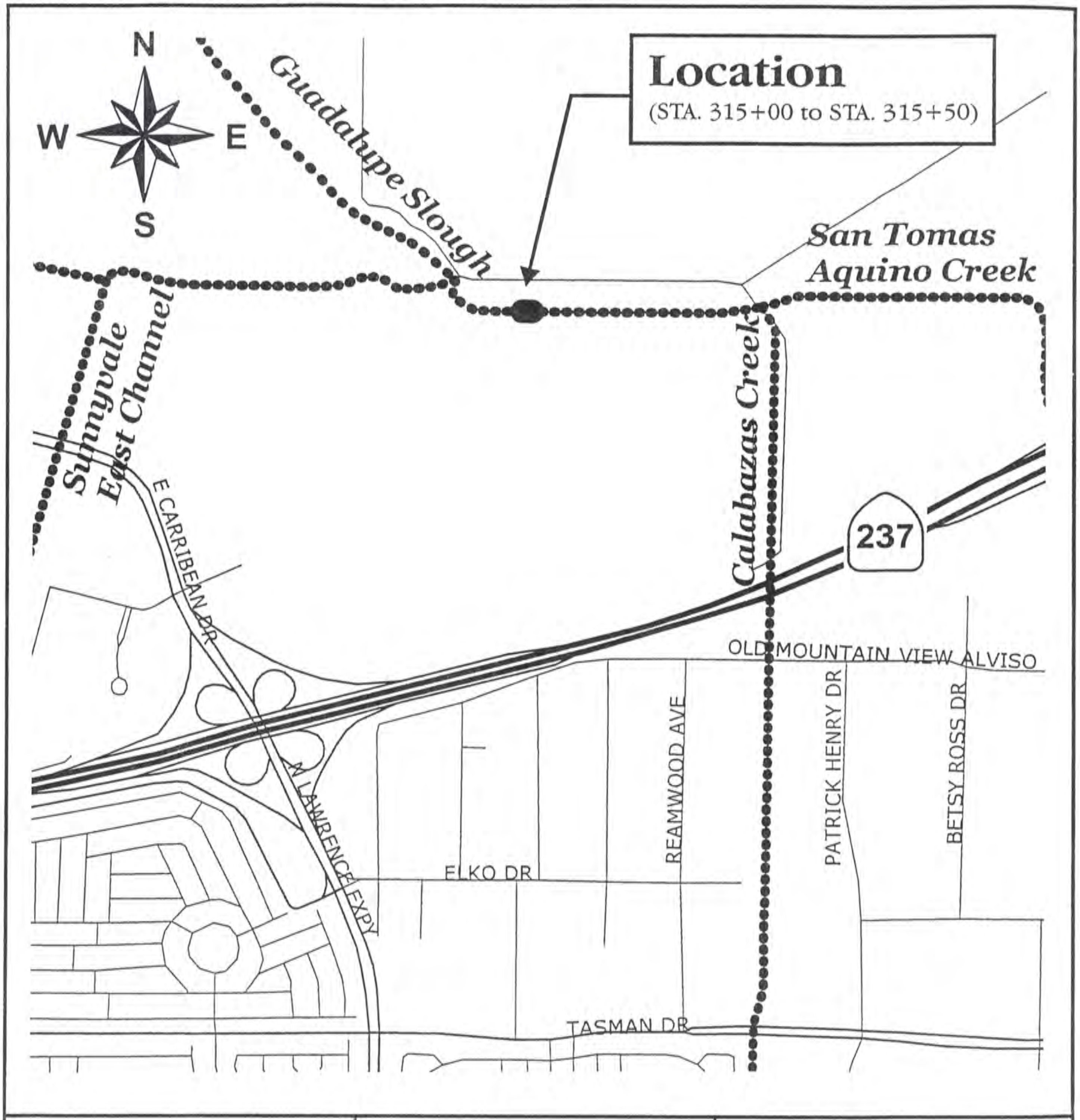
04/27/2001 11:00 a.m.

Figure B-5d - East Little Llagas Creek - Church Avenue to San Martin Avenue.



View 1 - Looking upstream at eroded channel. *(ELlagas29.jpg)*

Figure B-6a-Vicinity Map, Guadalupe Slough, at Baylands



PURPOSE: To repair bank erosion in creek channels.

VICINITY MAP

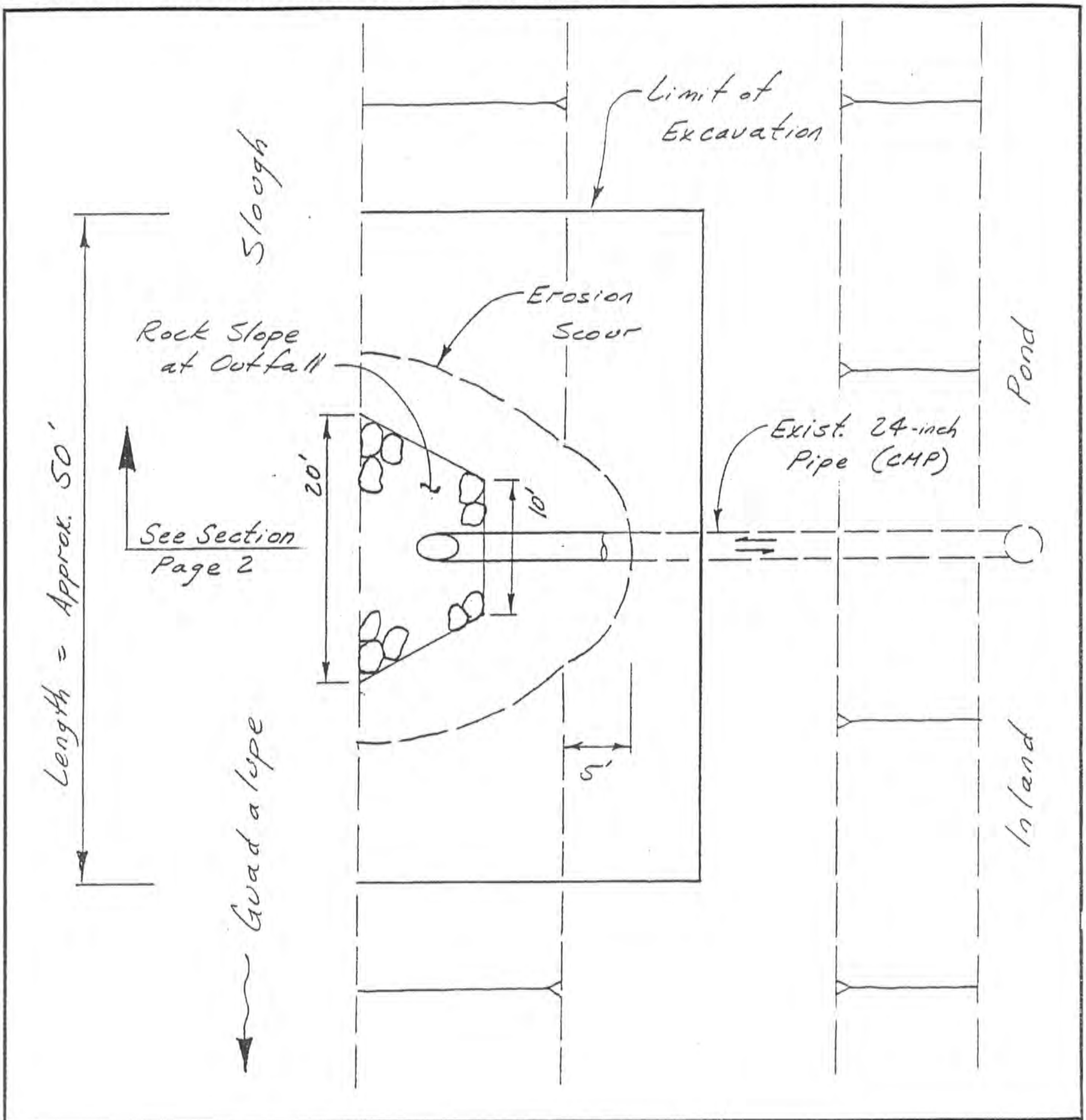
500 0 500 1000 Feet

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED BANK PROTECTION IN:
Guadalupe Slough
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure B-6b-Plan View, Guadalupe Slough, at Baylands



PURPOSE: To repair bank erosion in creek channels.

PLAN VIEW

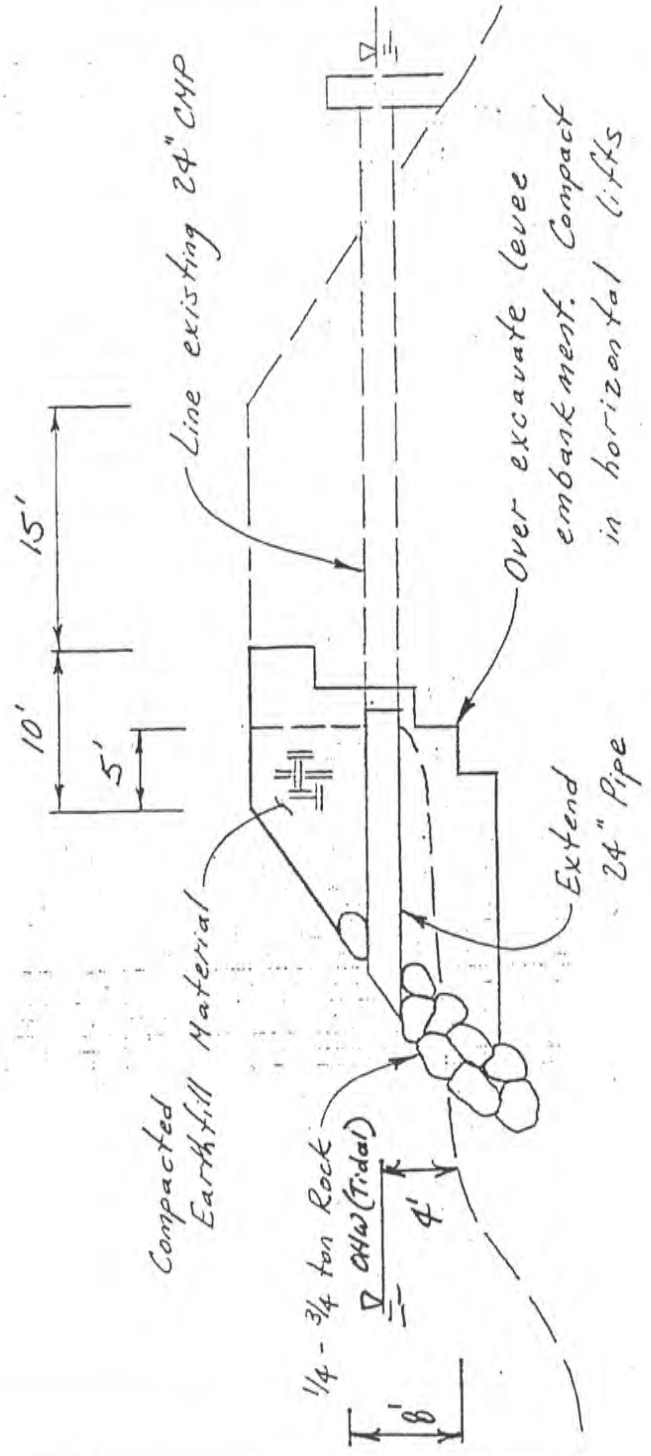
Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED BANK PROTECTION IN:
Guadalupe Slough
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

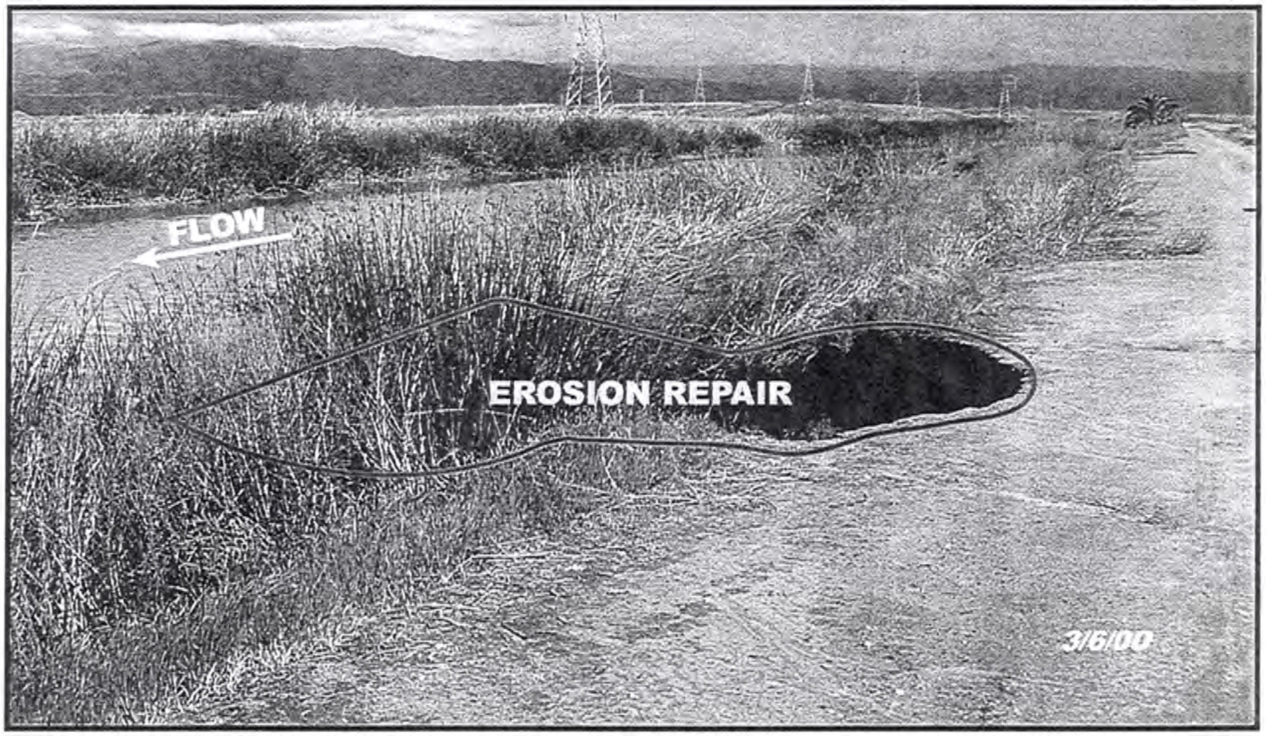
Figure B-6c-Typical Section, Guadalupe Slough, at Baylands


Line existing 24" CMP
Over excavate levee embankment. Compact in horizontal lifts
15'
10'
5'
Extend 24" Pipe
Compacted Earthfill Material
1/4 - 3/4 ton Rock
OHW (Tidal)
4'
8'

PURPOSE: To repair bank erosion in creek channels.	**TYPICAL SECTION** Not to scale Santa Clara Valley Water District 5750 Almaden Expressway San Jose, California 95118 www.scvwd.dst.ca.us	*PROPOSED BANK PROTECTION IN:* Guadalupe Slough *COUNTY OF:* Santa Clara *APPLICATION BY:* Santa Clara Valley Water District *DATE:* May 2001

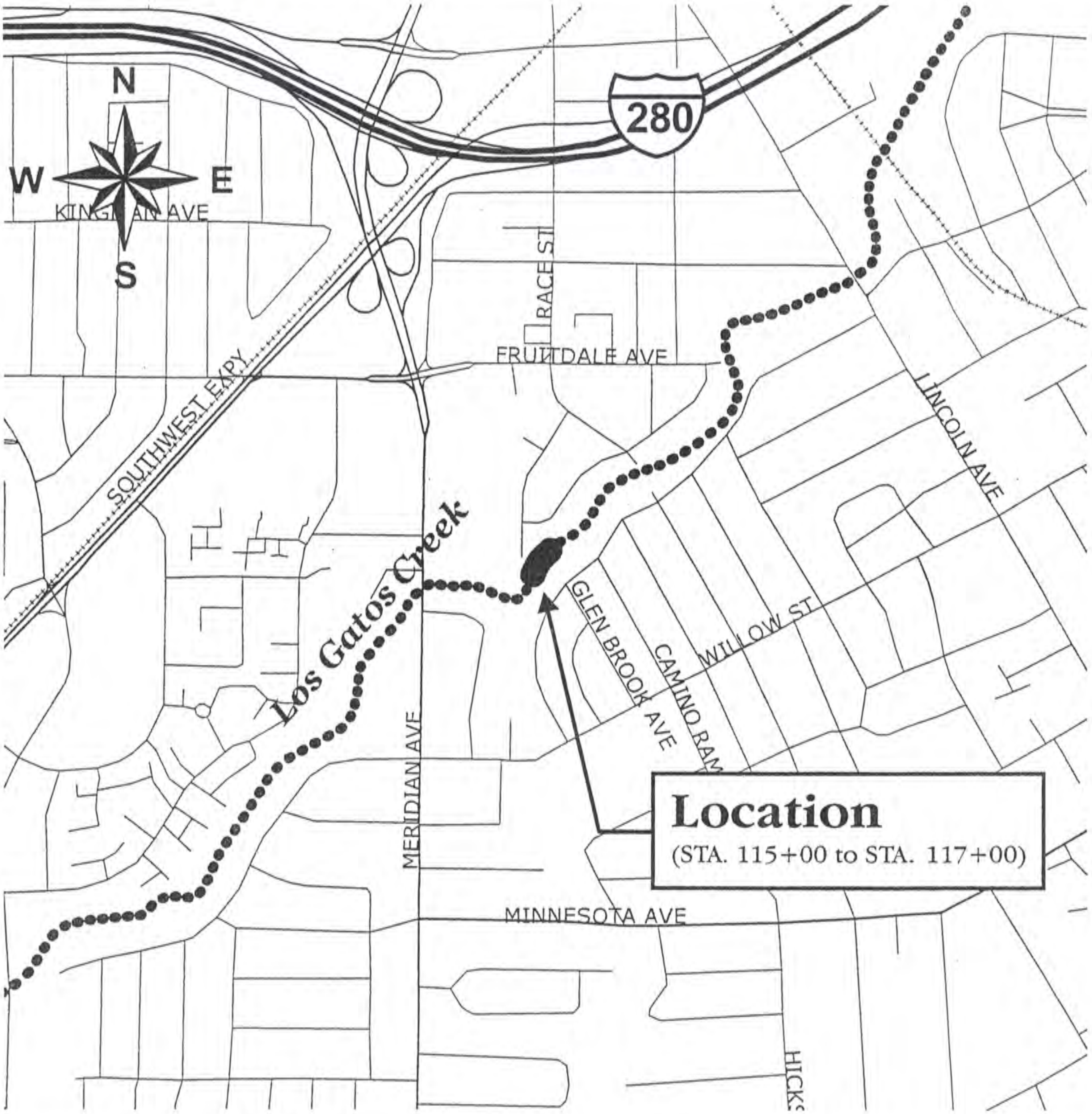
04/27/2001 11:00 a.m.

Figure B-6d - Guadalupe Slough at Baylands.



View 1 - Looking upstream (easterly) along top of levee at erosion scour. Project will replace outfall pipe and reconstruct levee embankment. Top of levee is also portion of San Francisco Bay Trail.
(Guadalupe Slough, View1 (Site32).jpg)

Figure B-7a-Vicinity Map, Los Gatos Creek, upstream of Lincoln Ave.



Location
(STA. 115+00 to STA. 117+00)

PURPOSE: To repair bank erosion in creek channels.

VICINITY MAP

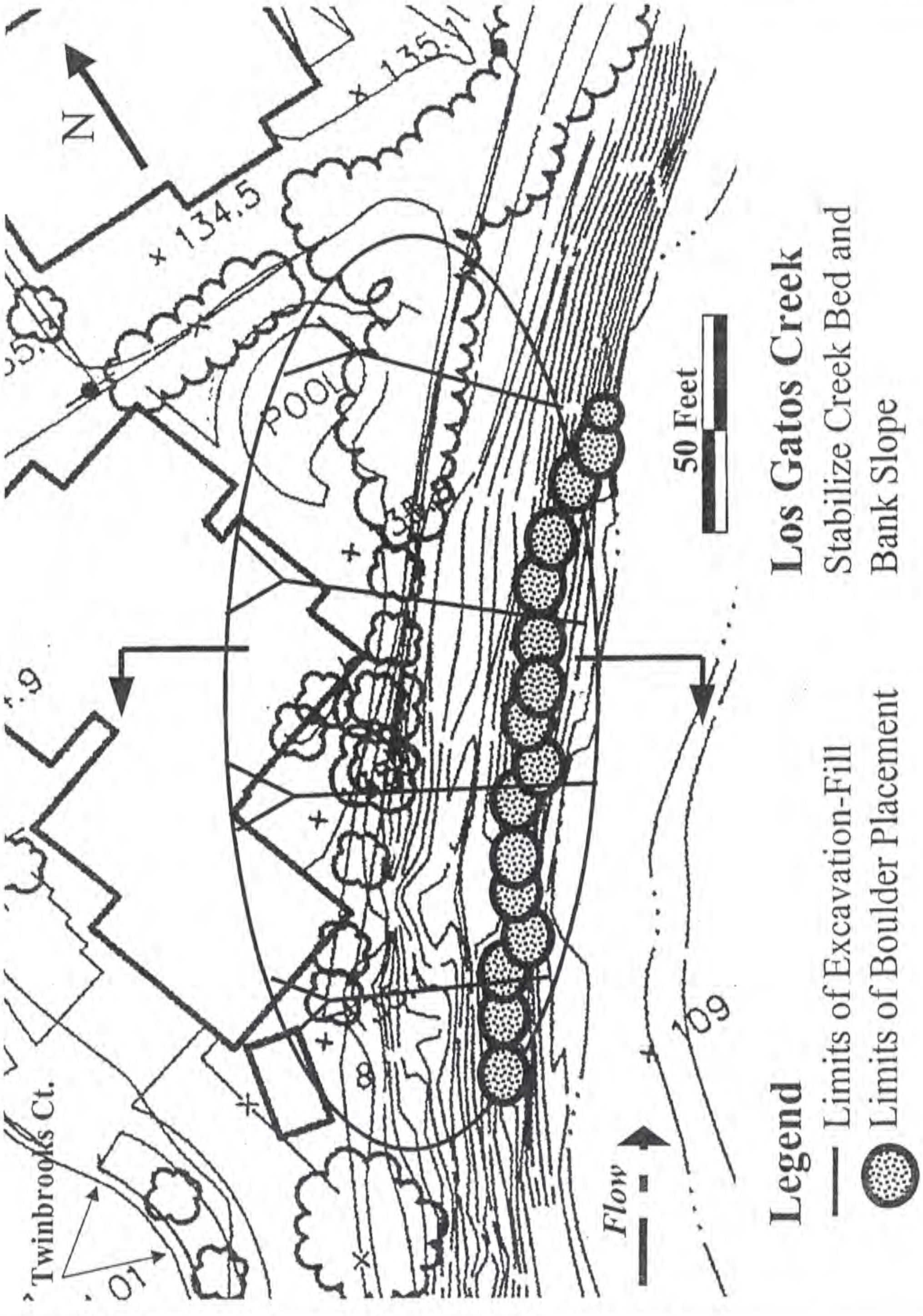
500 0 500 1000 Feet

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED BANK PROTECTION IN:
Los Gatos Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

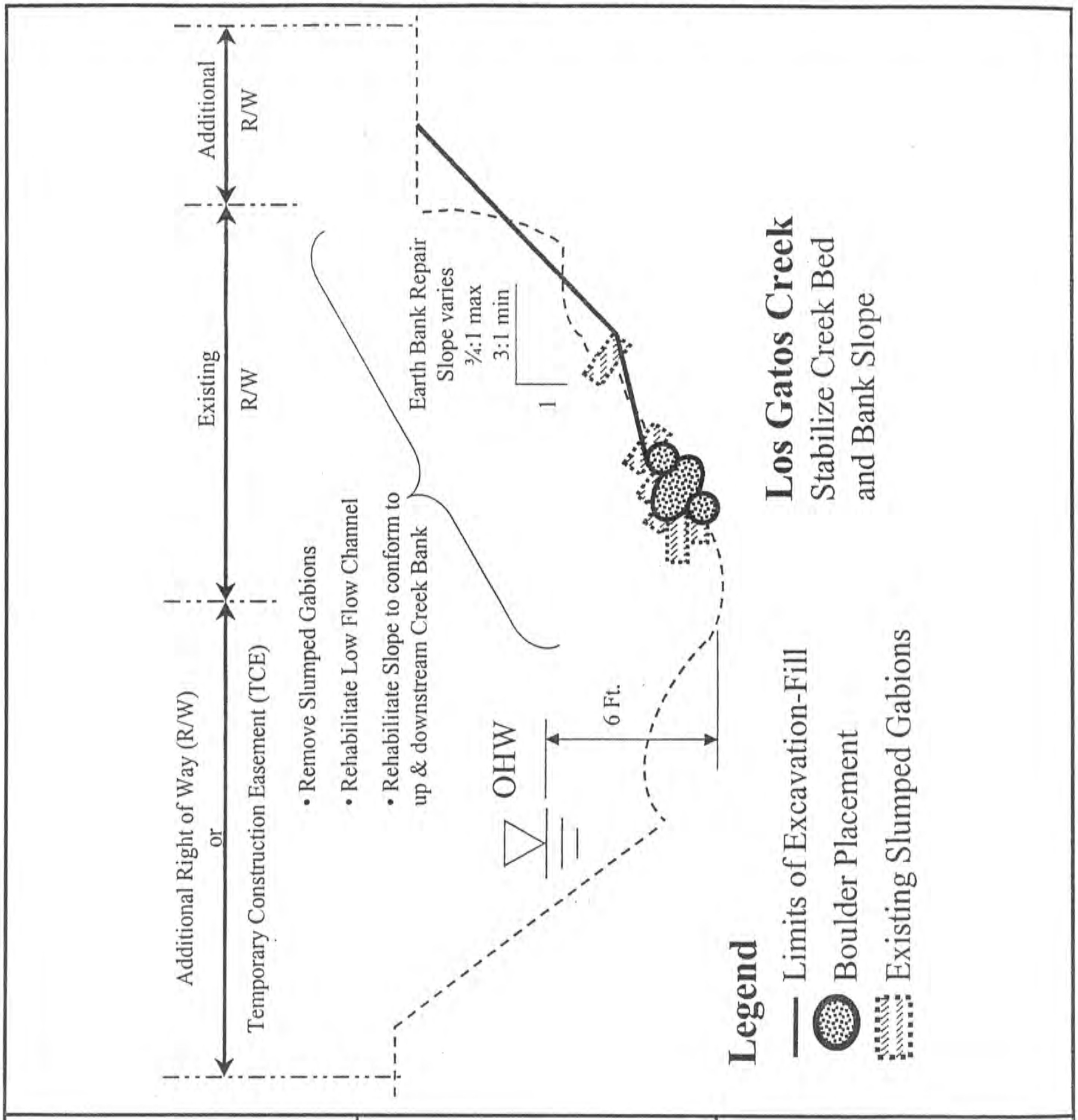
Figure B-7b-Plan View, Los Gatos Creek, upstream of Lincoln Ave.


N
× 135.7
× 134.5
POOL
38
8
.9
109
Twinbrooks Ct.
Flow
50 Feet
Los Gatos Creek
Stabilize Creek Bed and Bank Slope
Legend
— Limits of Excavation-Fill
● Limits of Boulder Placement

PURPOSE: To repair bank erosion in creek channels.	PLAN VIEW Not to scale Santa Clara Valley Water District 5750 Almaden Expressway San Jose, California 95118 www.scvwd.dst.ca.us	*PROPOSED BANK PROTECTION IN:* Los Gatos Creek *COUNTY OF:* Santa Clara *APPLICATION BY:* Santa Clara Valley Water District *DATE:* May 2001

04/27/2001 11:00 a.m.

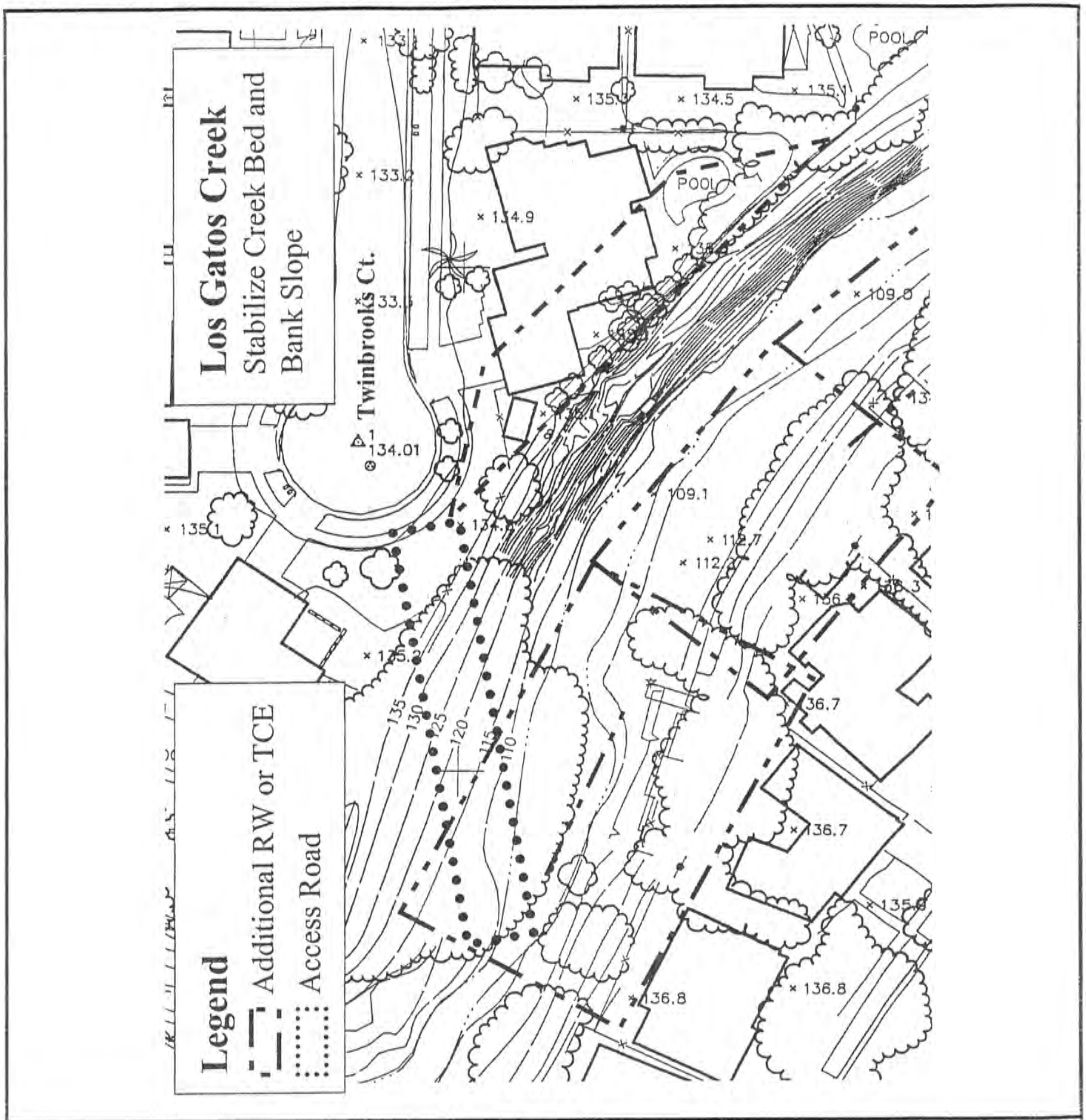
Figure B-7c-Typical Section, Los Gatos Creek, upstream of Lincoln Ave.


Additional R/W
Existing R/W
Additional Right of Way (R/W) or Temporary Construction Easement (TCE)
• Remove Slumped Gabions
• Rehabilitate Low Flow Channel
• Rehabilitate Slope to conform to up & downstream Creek Bank
Earth Bank Repair
Slope varies
¾:1 max
3:1 min
1
OHW
6 Ft.
Los Gatos Creek
Stabilize Creek Bed and Bank Slope
Legend
Limits of Excavation-Fill
Boulder Placement
Existing Slumped Gabions

PURPOSE: To repair bank erosion in creek channels.	TYPICAL SECTION Not to scale Santa Clara Valley Water District 5750 Almaden Expressway San Jose, California 95118 www.scvwd.dst.ca.us	*PROPOSED BANK PROTECTION IN:* Los Gatos Creek *COUNTY OF:* Santa Clara *APPLICATION BY:* Santa Clara Valley Water District *DATE:* May 2001

04/27/2001 11:00 a.m.

Figure B-7d-Plan View, Los Gatos Creek, upstream of Lincoln Ave.



PURPOSE: To repair bank erosion in creek channels.

PLAN VIEW

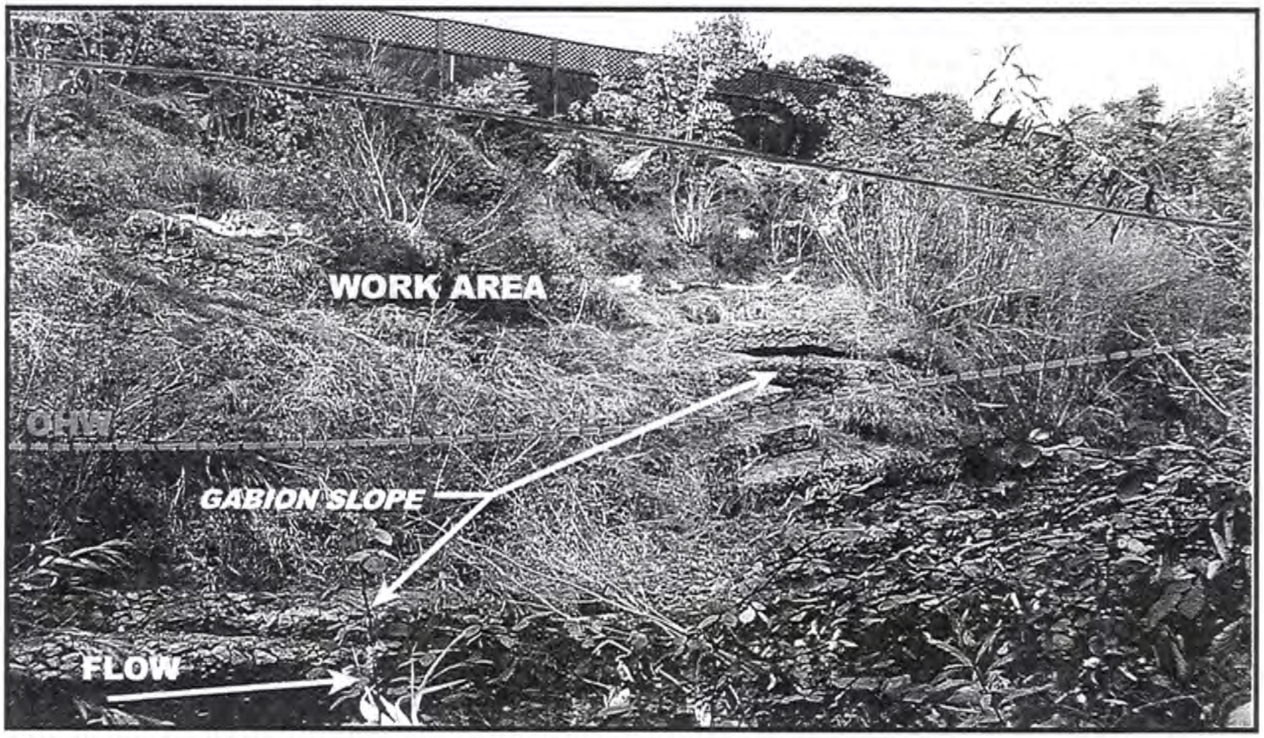
Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED BANK PROTECTION IN:
Los Gatos Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

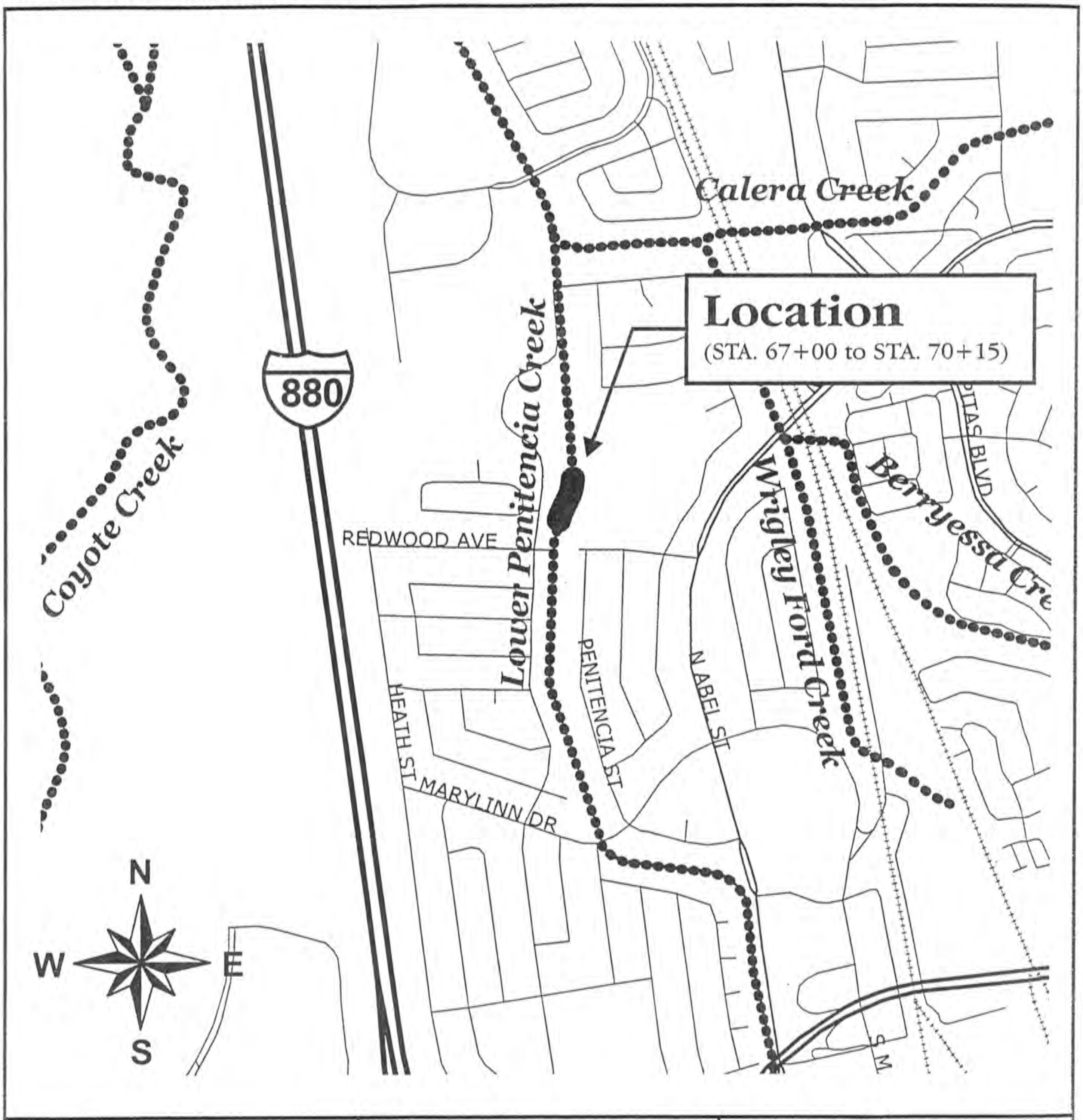
04/27/2001 11:00 a.m.

Figure B-7e - Los Gatos Creek upstream of Lincoln Avenue.



View 1 - Looking west. Note unstable area with collapsed gabion slope protection.
(Unstable Bank2 Los Gatos Creek u-s Lincoln.jpg)

Figure B-8a-Vicinity Map, Lower Penitencia Creek, downstream of Redwood Ave.



PURPOSE: To repair bank erosion in creek channels.

VICINITY MAP

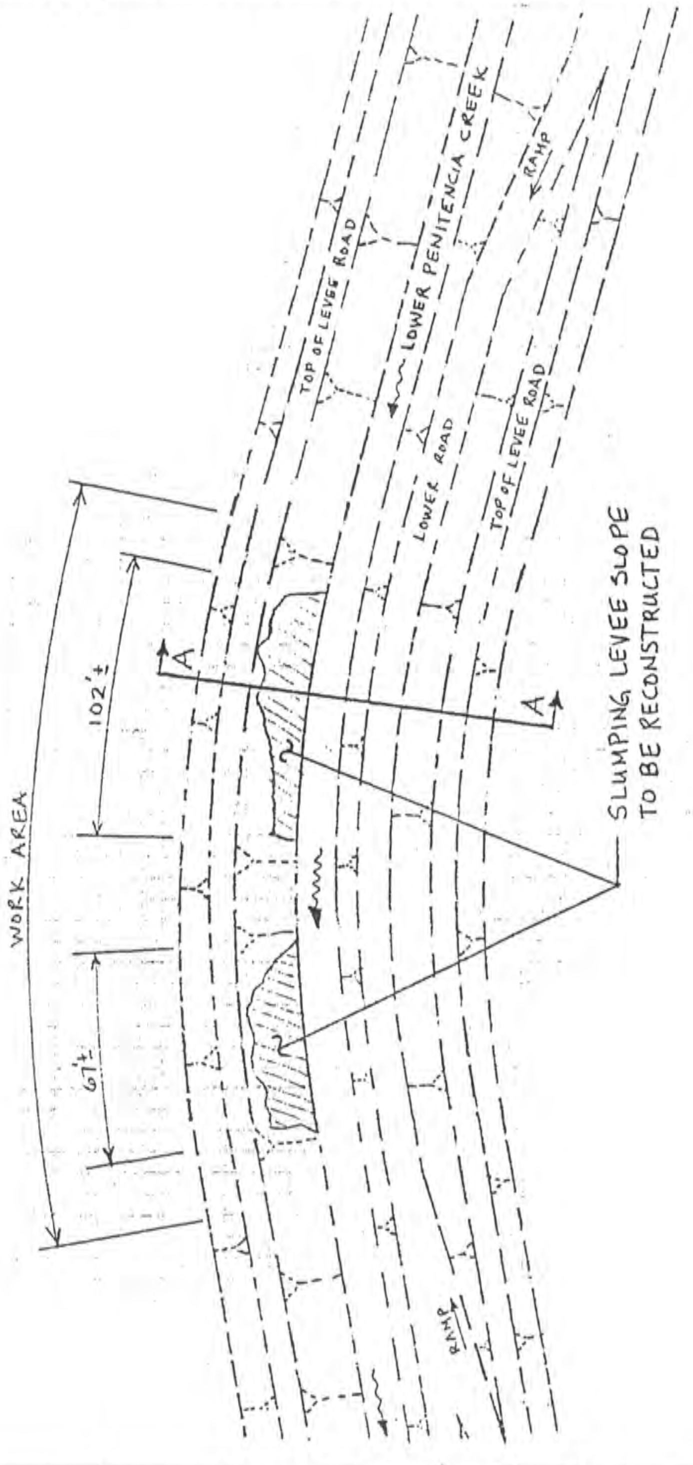
500 0 500 1000 Feet

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED BANK PROTECTION IN:
Lower Penitencia Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley
Water District
DATE: May 2001

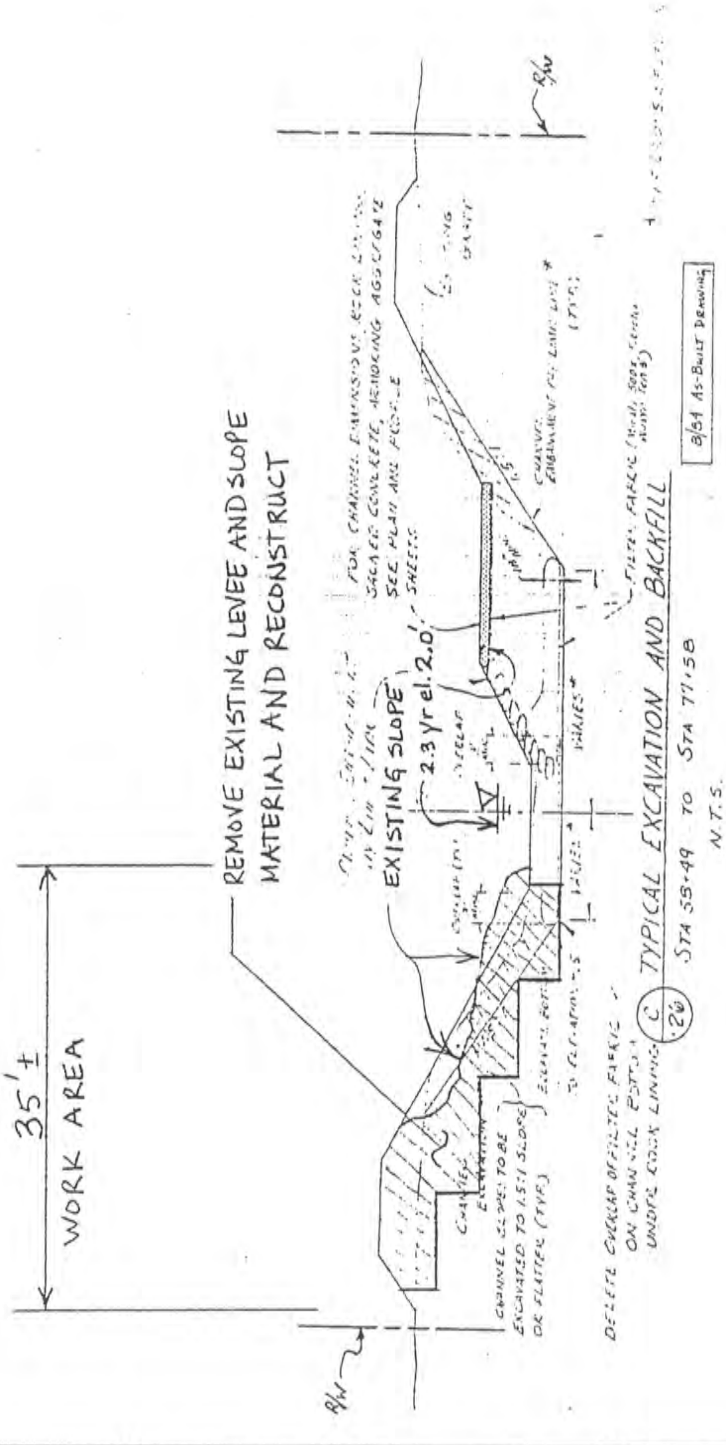
04/27/2001 11:00 a.m.

Figure B-8b-Plan View, Lower Penitencia Creek, downstream of Redwood Ave.



PURPOSE: To repair bank erosion in creek channels.	**PLAN VIEW** Not to scale Santa Clara Valley Water District 5750 Almaden Expressway San Jose, California 95118 www.scvwd.dst.ca.us	*PROPOSED BANK PROTECTION IN:* Lower Penitencia Creek *COUNTY OF:* Santa Clara *APPLICATION BY:* Santa Clara Valley Water District *DATE:* May 2001

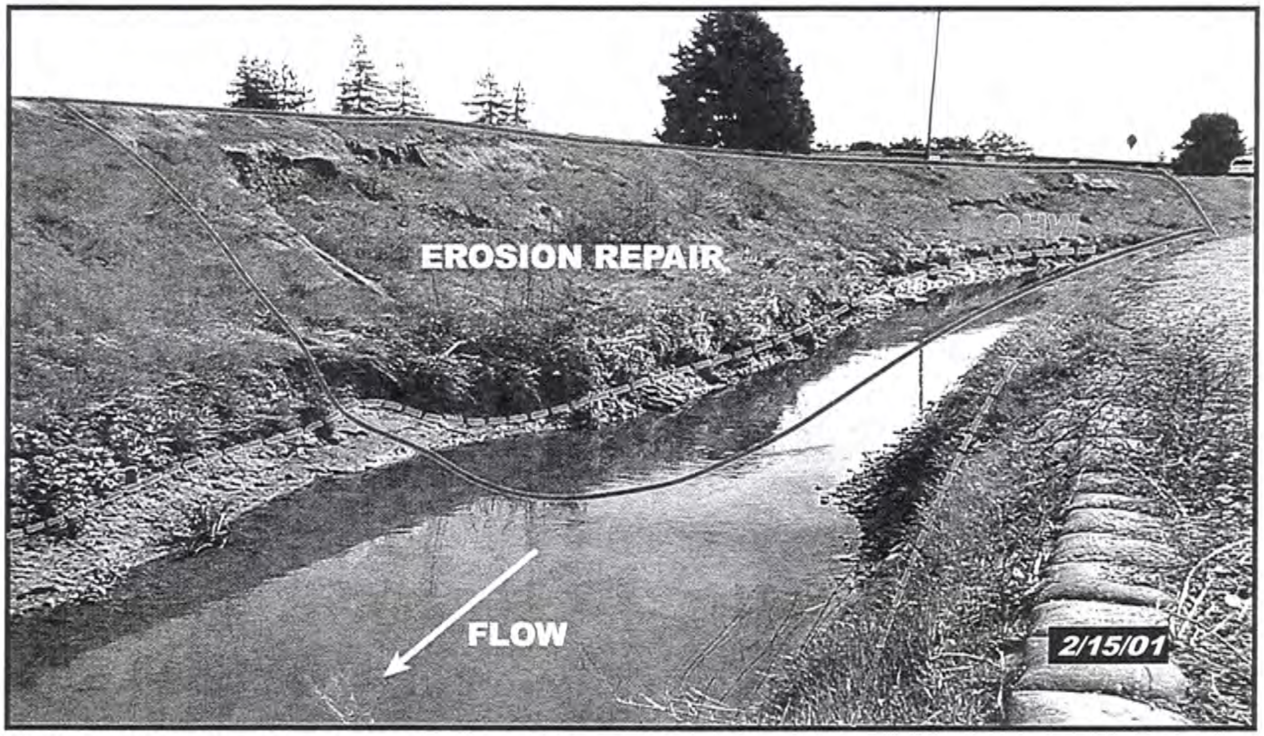
Figure B-8c-Typical Section, Lower Penitencia Creek, downstream of Redwood Ave.



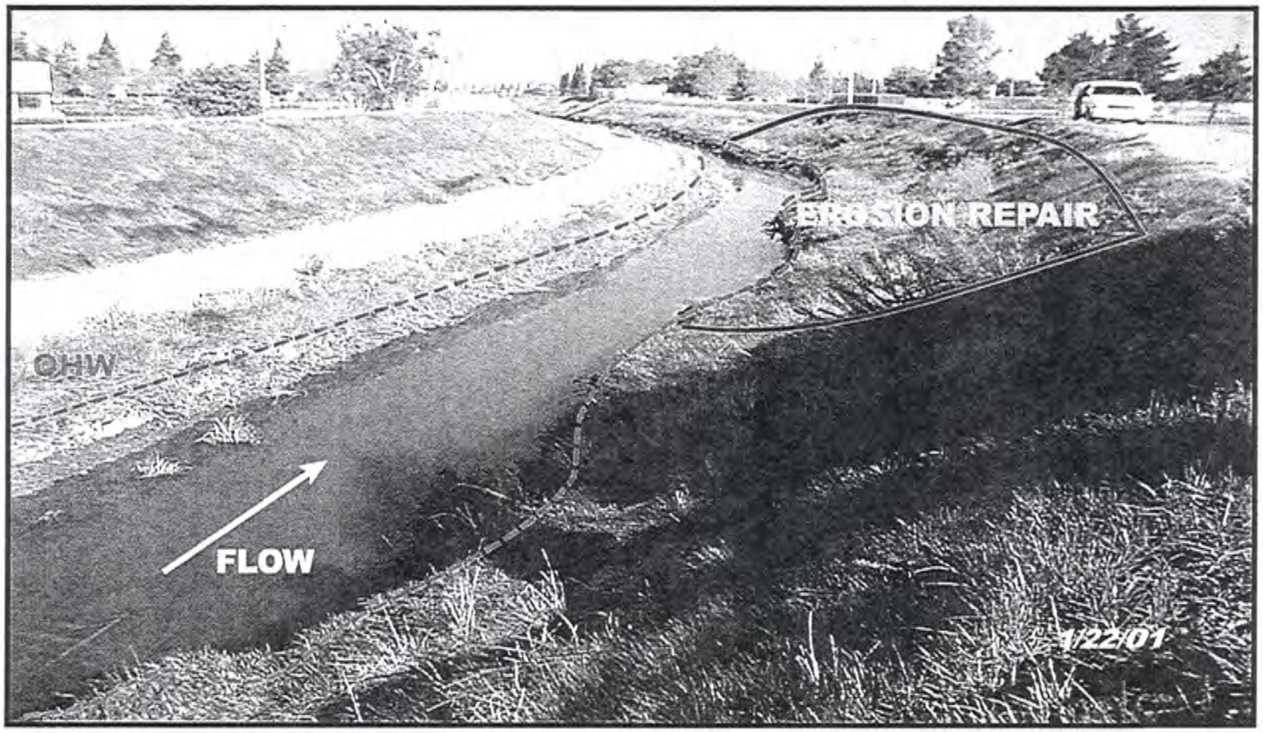
PURPOSE: To repair bank erosion in creek channels.	**TYPICAL SECTION** Not to scale Santa Clara Valley Water District 5750 Almaden Expressway San Jose, California 95118 www.scvwd.dst.ca.us	***PROPOSED BANK PROTECTION IN:*** Lower Penitencia Creek ***COUNTY OF:*** Santa Clara ***APPLICATION BY:*** Santa Clara Valley Water District ***DATE:*** May 2001

04/27/2001 11:00 a.m.

Figure B-8d - Lower Penitencia Creek - downstream of Redwood Avenue.

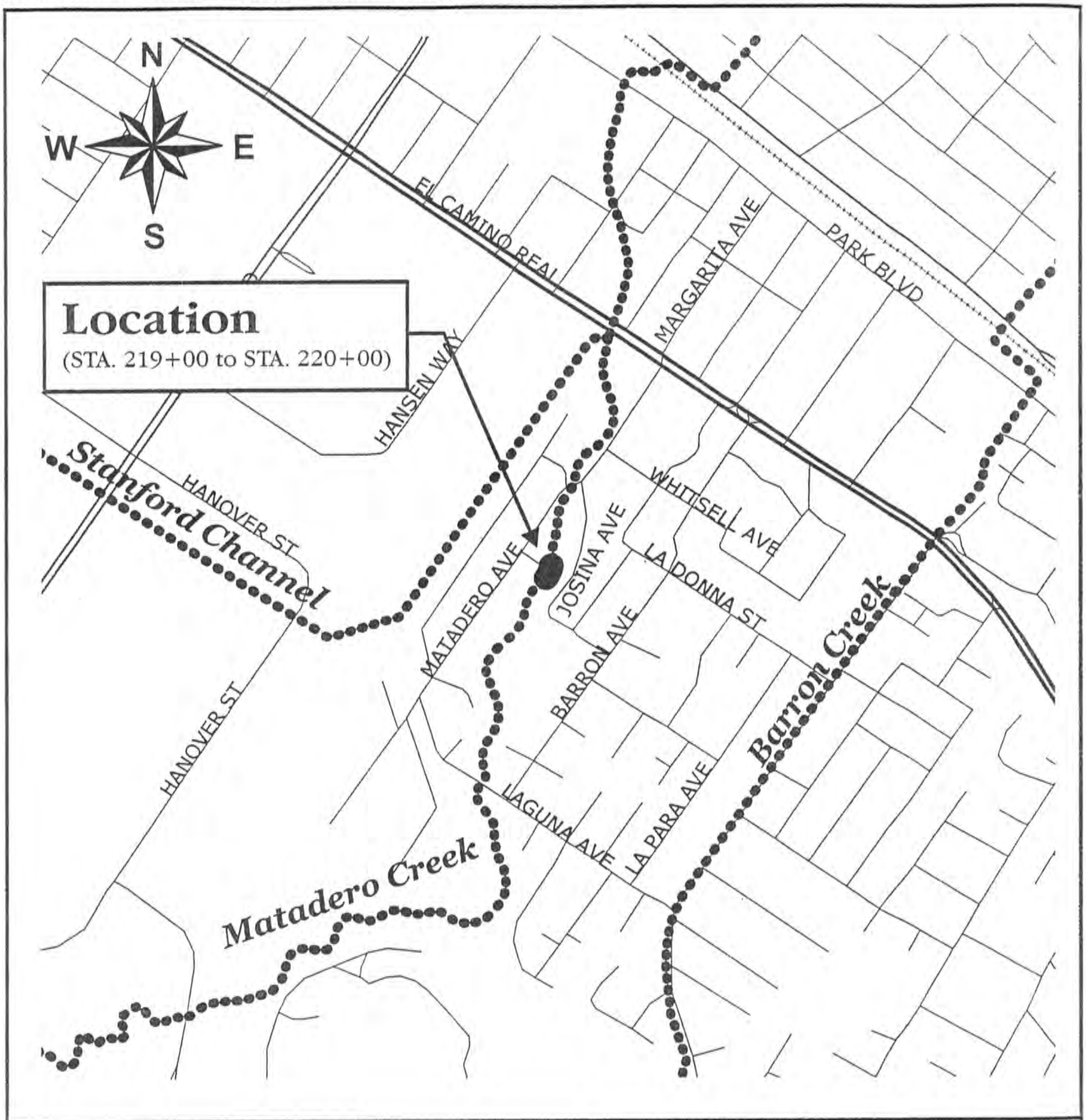


View 1 - Looking upstream towards Redwood Avenue at repair areas. *(LPenitencia36.jpg)*



View 2 - Looking downstream at erosion areas. *(LPenitencia36b.jpg)*

Figure B-9a-Vicinity Map, Matadero Creek at Josina Ave.



PURPOSE: To repair bank erosion in creek channels.

VICINITY MAP

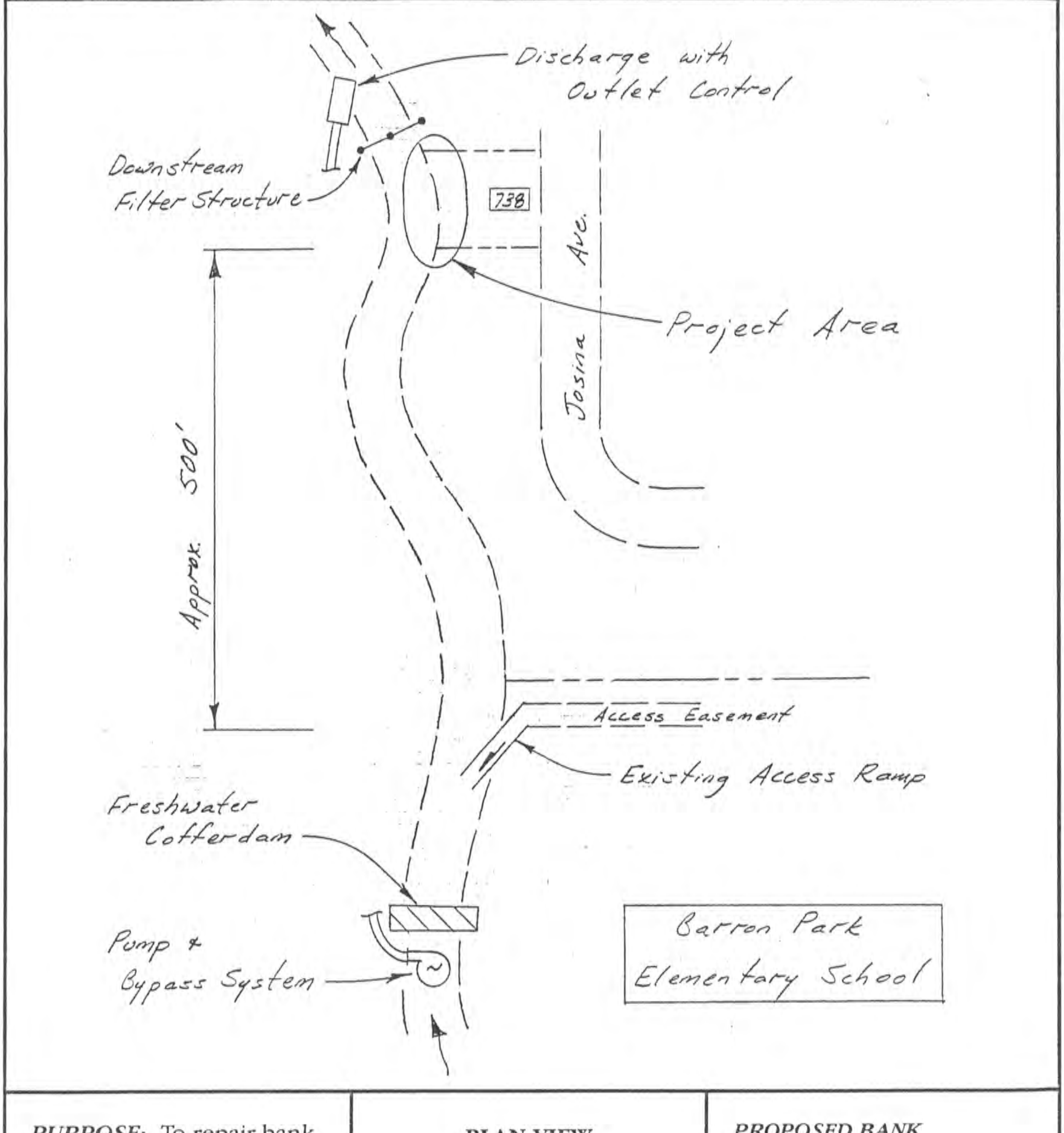
500 0 500 1000 Feet

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED BANK PROTECTION IN:
Matadero Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

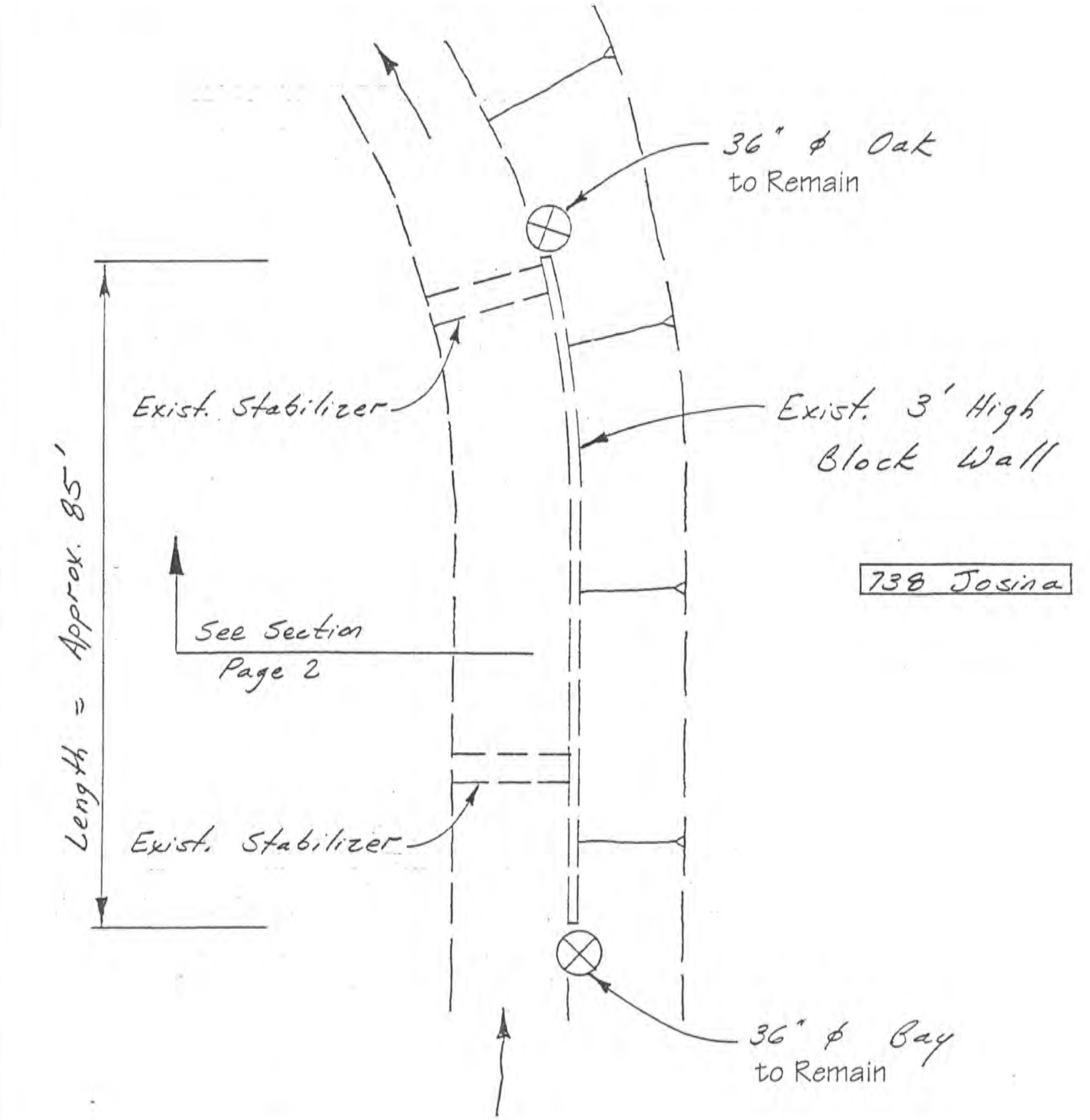
Figure B-9b-Plan View, Matadero Creek at Josina Ave.



PURPOSE: To repair bank erosion in creek channels.	**PLAN VIEW** Not to scale Santa Clara Valley Water District 5750 Almaden Expressway San Jose, California 95118 www.scvwd.dst.ca.us	*PROPOSED BANK PROTECTION IN:* Matadero Creek *COUNTY OF:* Santa Clara *APPLICATION BY:* Santa Clara Valley Water District *DATE:* May 2001

04/27/2001 11:00 a.m.

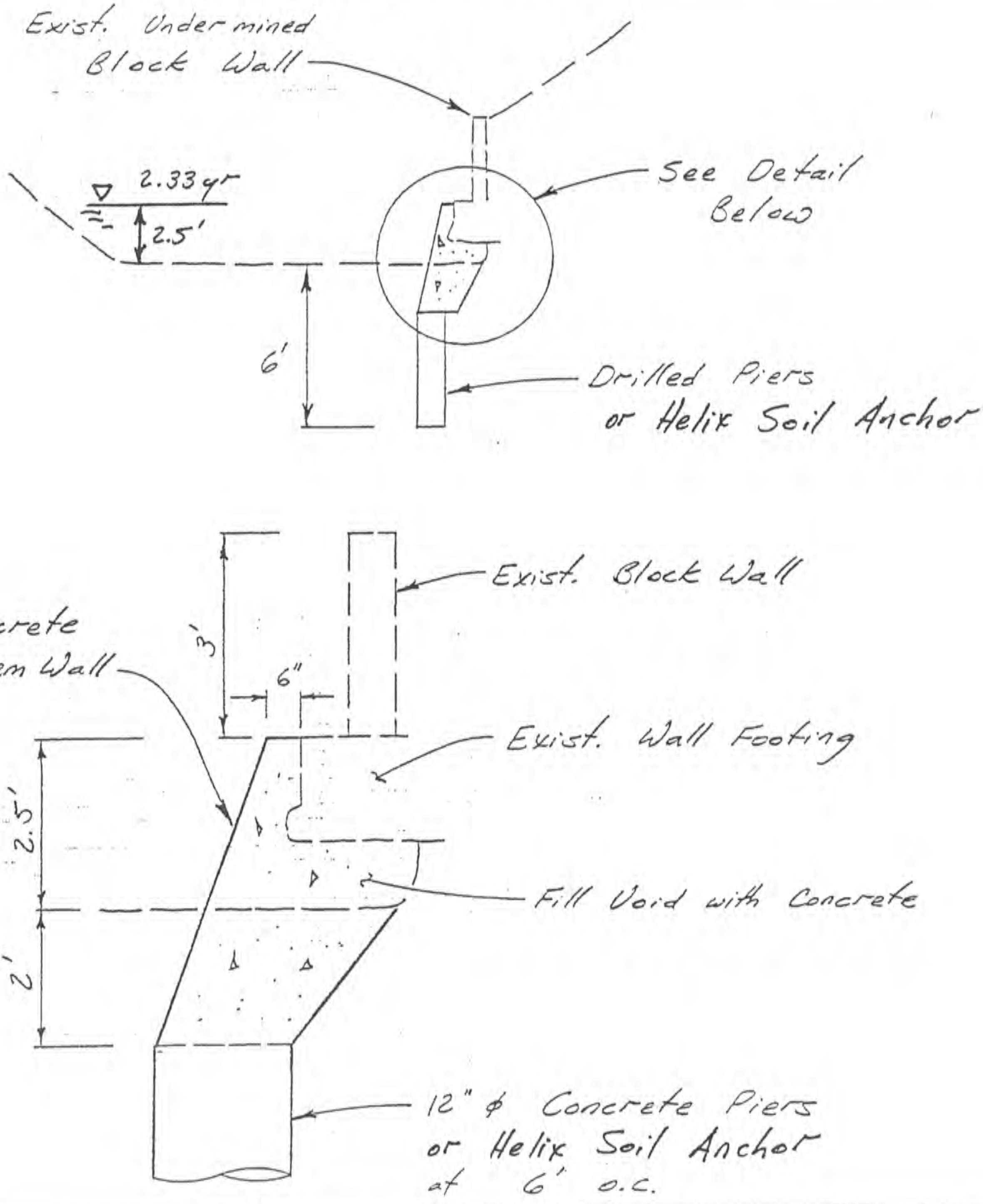
Figure B-9c-Plan View, Matadero Creek at Josina Ave.



PURPOSE: To repair bank erosion in creek channels.	**PLAN VIEW** Not to scale Santa Clara Valley Water District 5750 Almaden Expressway San Jose, California 95118 www.scvwd.dst.ca.us	*PROPOSED BANK PROTECTION IN:* Matadero Creek *COUNTY OF:* Santa Clara *APPLICATION BY:* Santa Clara Valley Water District *DATE:* May 2001

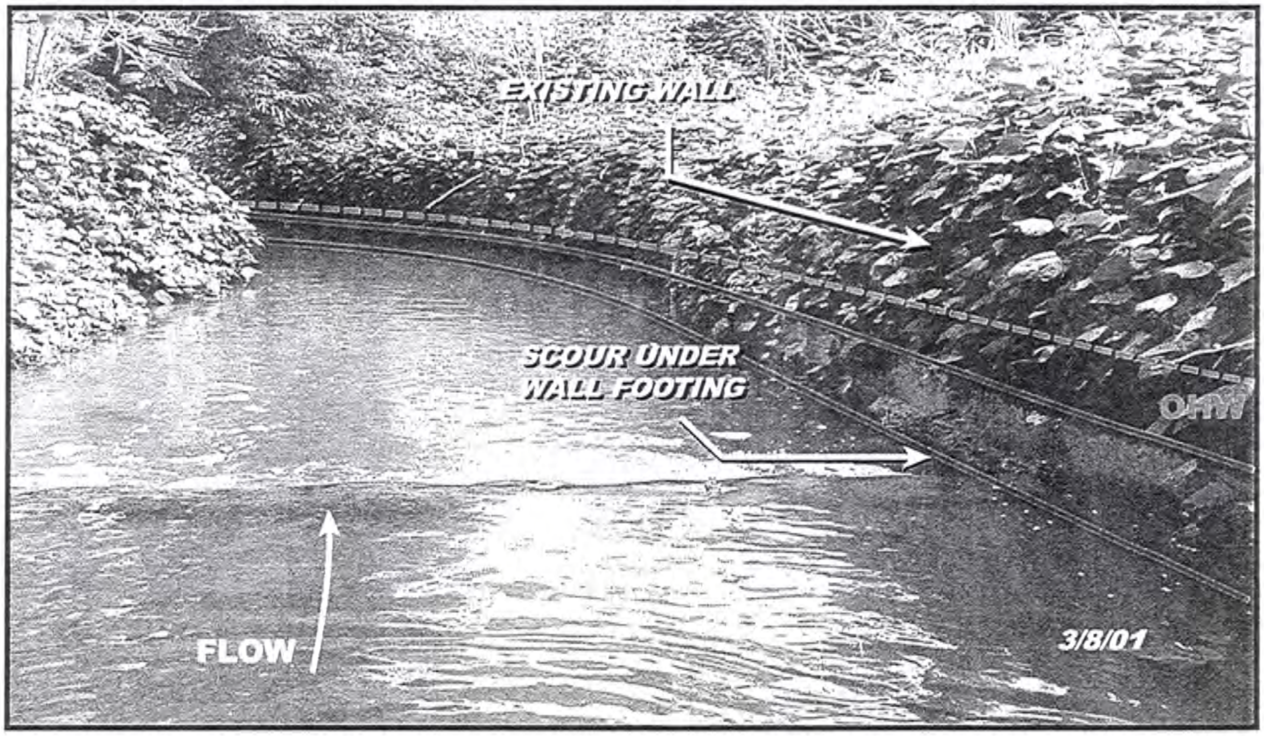
04/27/2001 11:00 a.m.

Figure B-9d-Typical Section, Matadero Creek at Josina Ave.



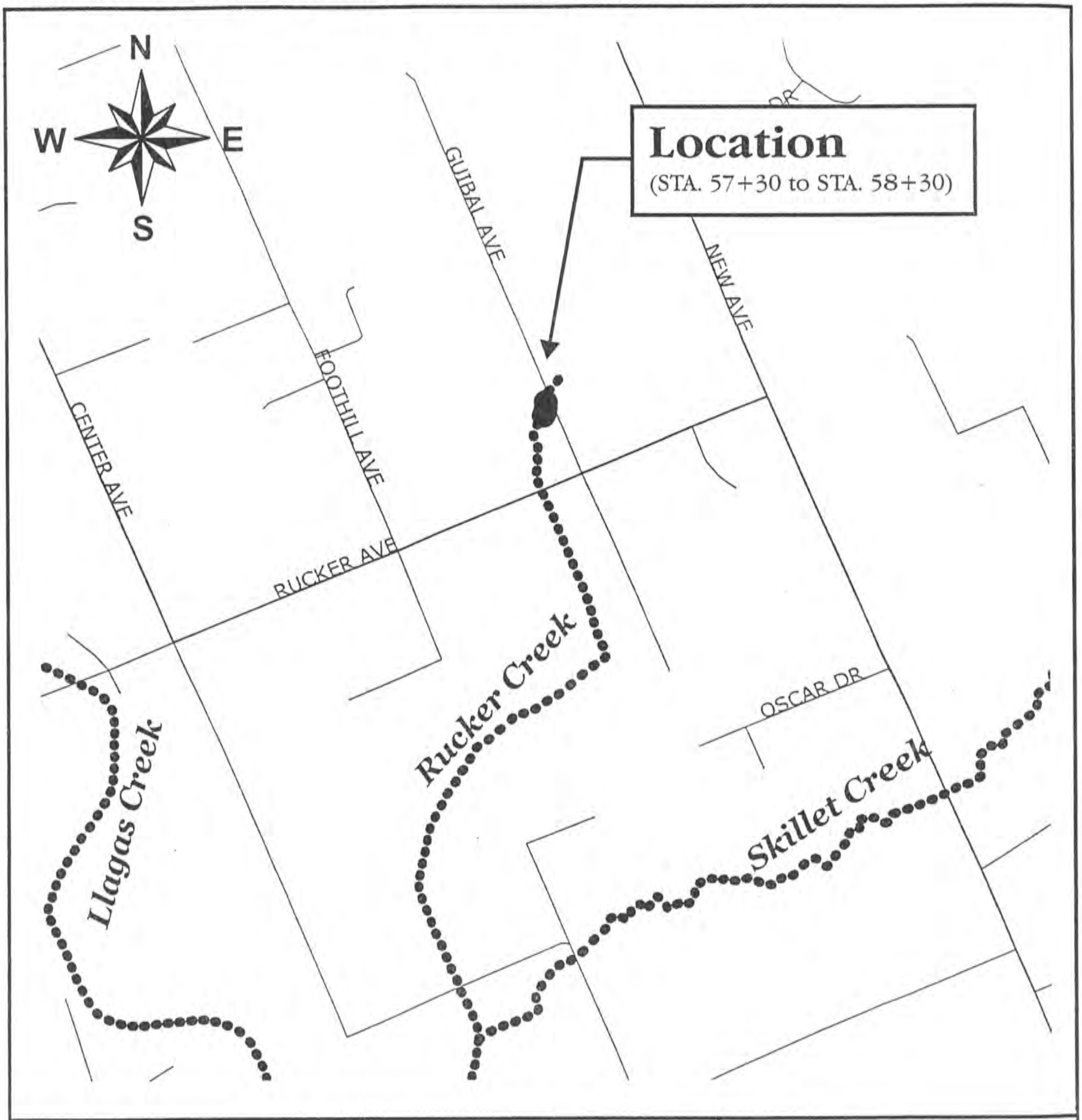
PURPOSE: To repair bank erosion in creek channels.	**TYPICAL SECTION** Not to scale Santa Clara Valley Water District 5750 Almaden Expressway San Jose, California 95118 www.scvwd.dst.ca.us	***PROPOSED BANK PROTECTION IN:*** Matadero Creek ***COUNTY OF:*** Santa Clara ***APPLICATION BY:*** Santa Clara Valley Water District ***DATE:*** May 2001

Figure B-9e - Matadero Creek at Josina Avenue.



View 1 - Looking downstream at project area. Channel scour is undermining existing concrete block wall. A concrete stem wall will be constructed to prevent further scour and stabilize wall.
(Matadero at Josina, View1 (Site37).jpg)

Figure B-10a-Vicinity Map, Rucker Creek, downstream of Guibal Ave.



PURPOSE: To repair bank erosion in creek channels and to remove sediment from flood control channels to restore capacity.

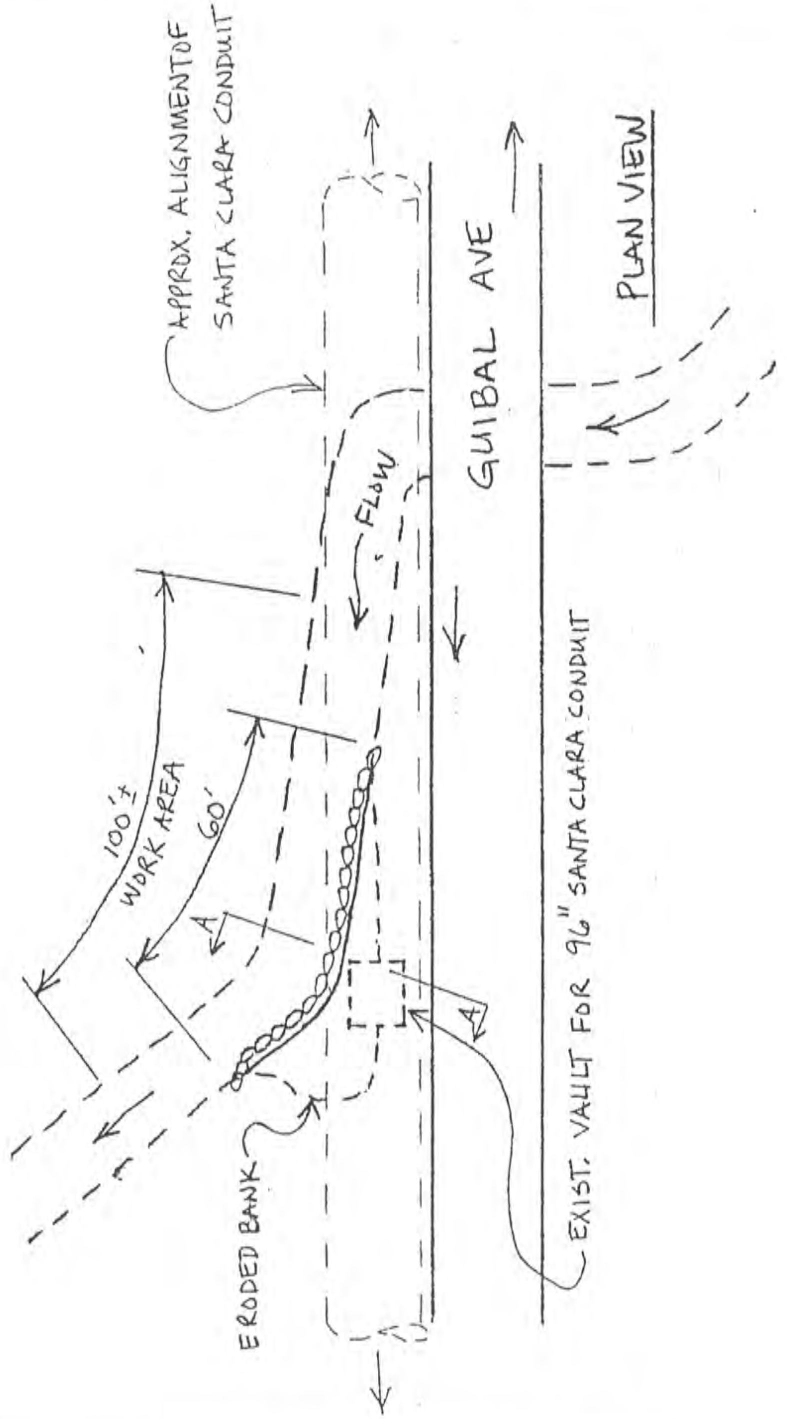
VICINITY MAP

500 0 500 1000 Feet

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED BANK PROTECTION AND SEDIMENT REMOVAL IN:
Rucker Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

Figure B-10b-Plan View, Rucker Creek, downstream of Guibal Ave.


APPROX. ALIGNMENT OF SANTA CLARA CONDUIT
PLAN VIEW
GUIBAL AVE
FLOW
100'±
WORK AREA
60'
A
A
ERODED BANK
EXIST. VAULT FOR 96" SANTA CLARA CONDUIT

PURPOSE: To repair bank erosion in creek channels and to remove sediment from flood control channels to restore capacity.

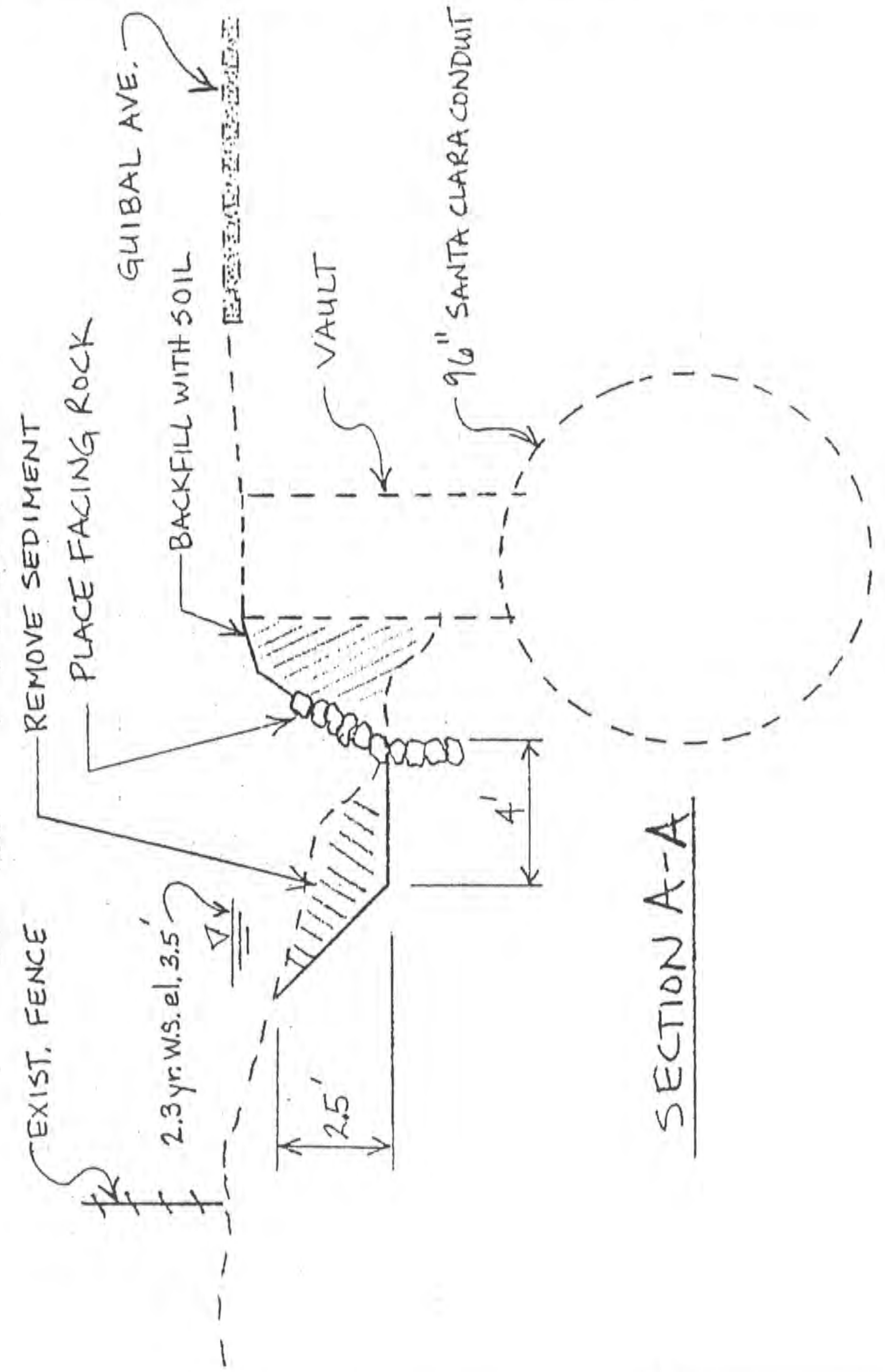
PLAN VIEW

Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED
BANK PROTECTION AND
SEDIMENT REMOVAL IN:
Rucker Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley
Water District
DATE: May 2001

Figure B-10c-Typical Section, Rucker Creek, downstream of Guibal Ave.



PURPOSE: To repair bank erosion in creek channels and to remove sediment from flood control channels to restore capacity.

TYPICAL SECTION

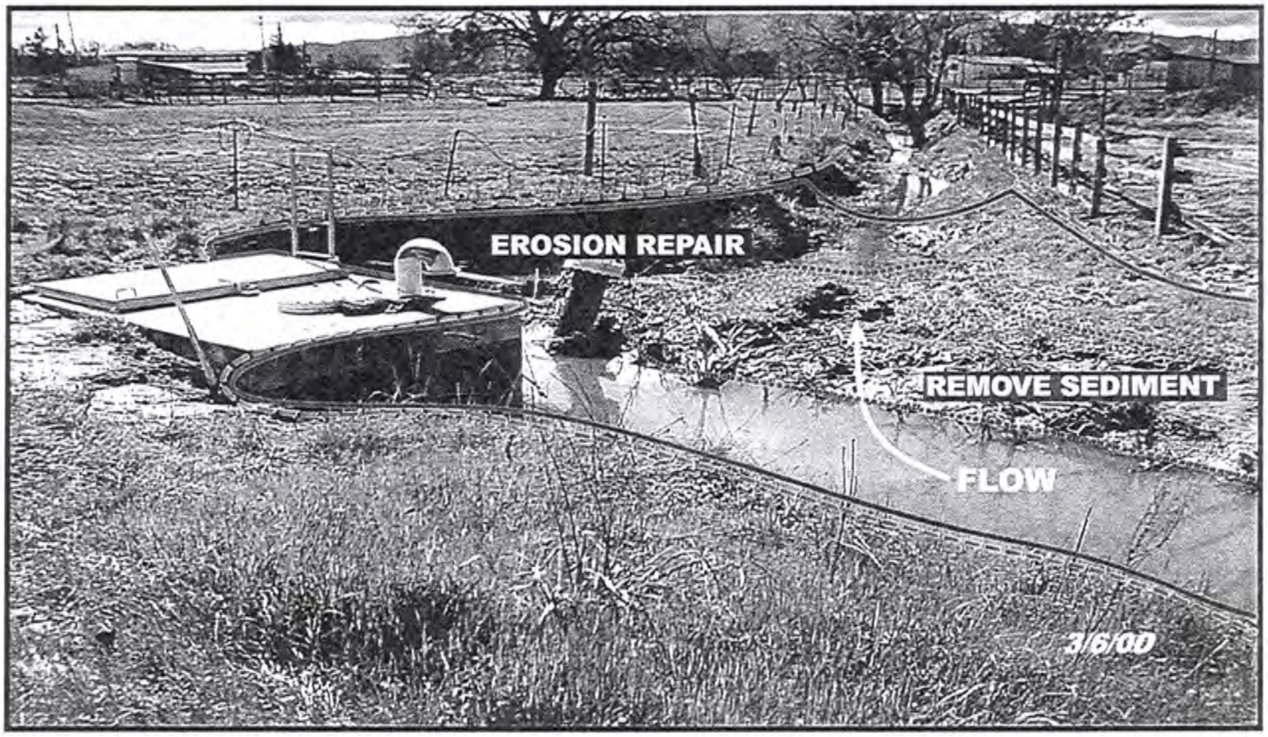
Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED
BANK PROTECTION AND
SEDIMENT REMOVAL IN:
Rucker Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley
Water District
DATE: May 2001

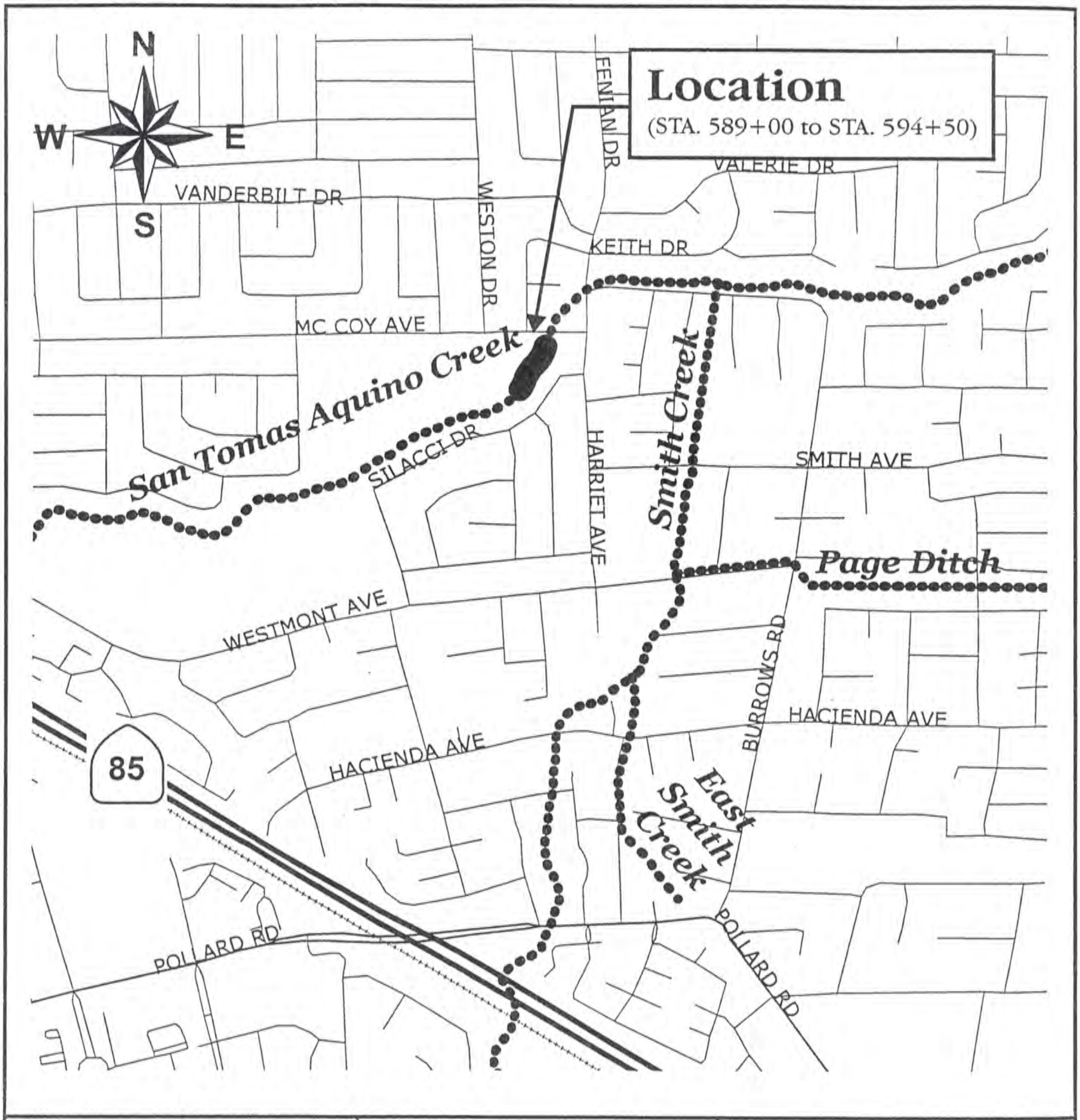
04/27/2001 11:00 a.m.

Figure B-10d - Rucker Creek - downstream of Guibal Avenue.



View 1 - Looking downstream at sediment removal and erosion repair areas. *(Rucker18.jpg)*

Figure B-11a-Vicinity Map, San Tomas Aquino Creek, upstream of McCoy Ave.



PURPOSE: To repair bank erosion in creek channels.

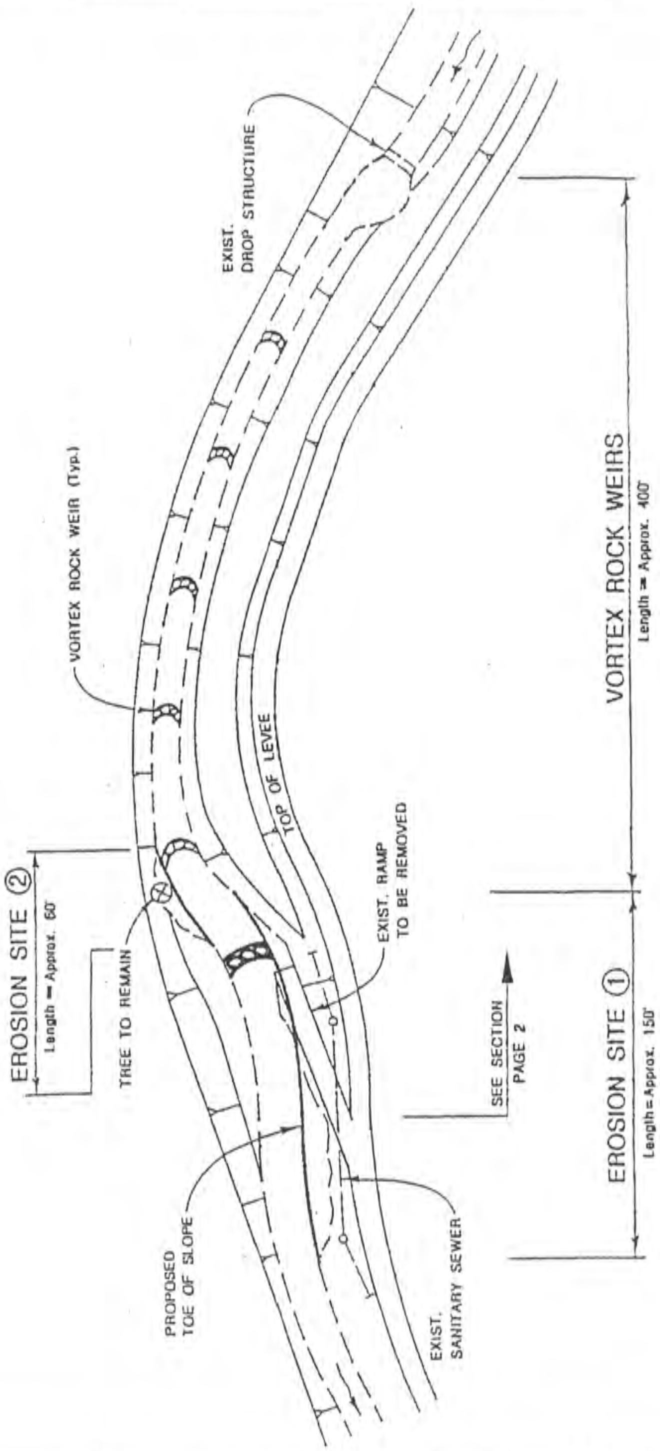
VICINITY MAP

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED BANK PROTECTION IN:
San Tomas Aquino Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

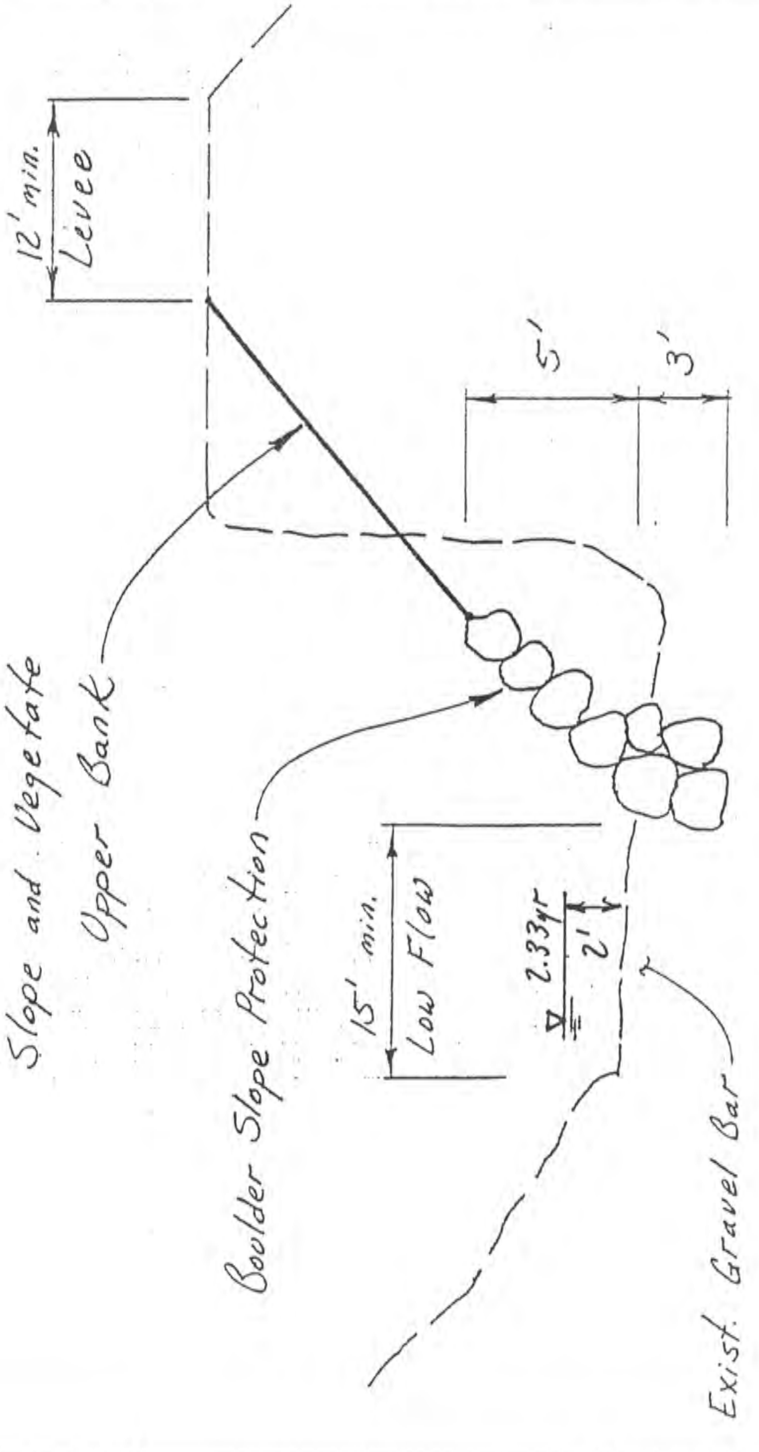
Figure B-11b-Plan View, San Tomas Aquino Creek, upstream of McCoy Ave.



PURPOSE: To repair bank erosion in creek channels.	**PLAN VIEW** Not to scale Santa Clara Valley Water District 5750 Almaden Expressway San Jose, California 95118 www.scvwd.dst.ca.us	*PROPOSED BANK PROTECTION IN:* San Tomas Aquino Creek *COUNTY OF:* Santa Clara *APPLICATION BY:* Santa Clara Valley Water District *DATE:* May 2001

04/27/2001 11:00 a.m.

Figure B-11c-Typical Section, San Tomas Aquino Creek, upstream of McCoy Ave.



PURPOSE: To repair bank erosion in creek channels.

TYPICAL SECTION

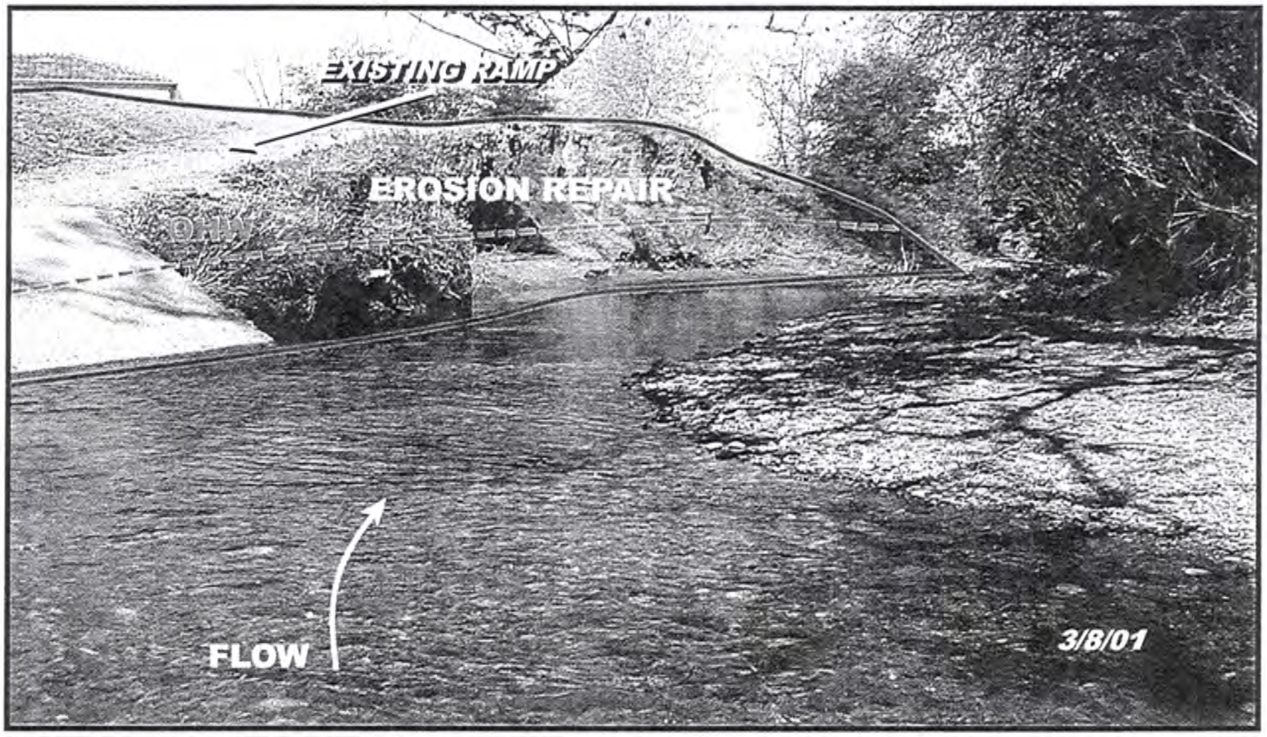
Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

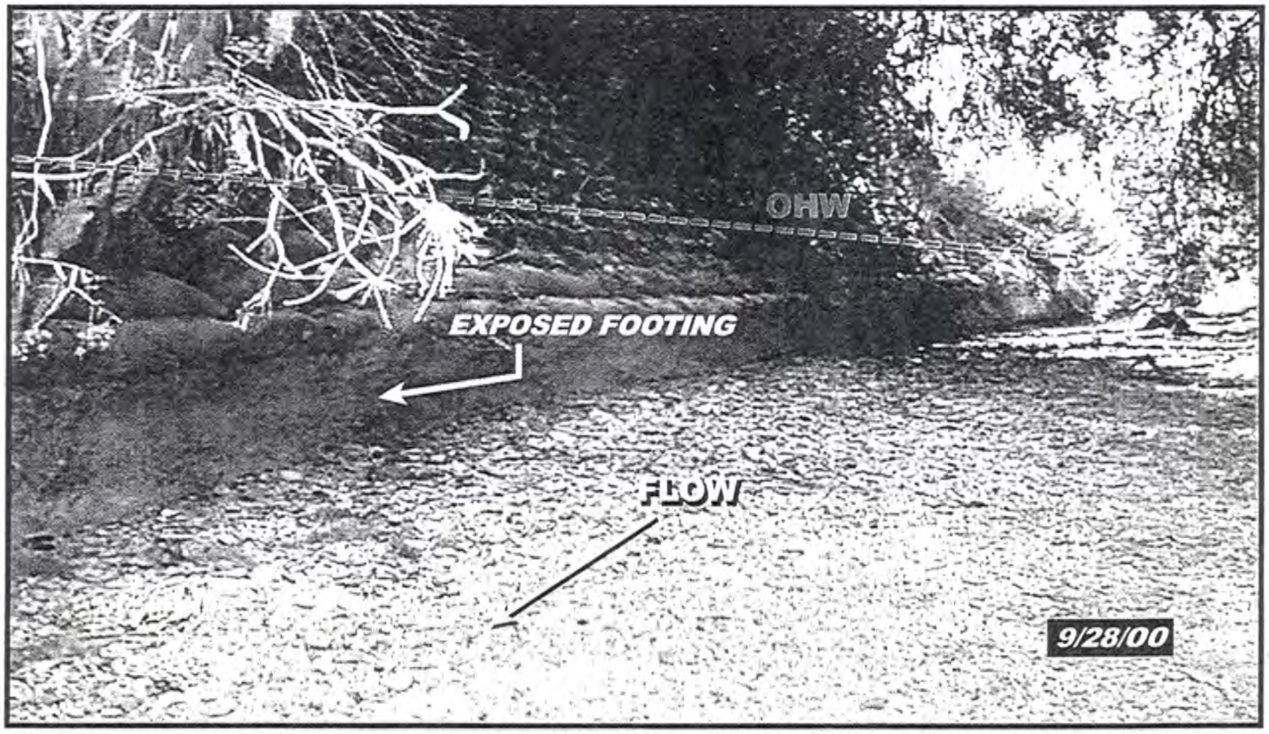
PROPOSED BANK PROTECTION IN:
San Tomas Aquino Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure B-11d - San Tomas Creek upstream of McCoy Avenue.

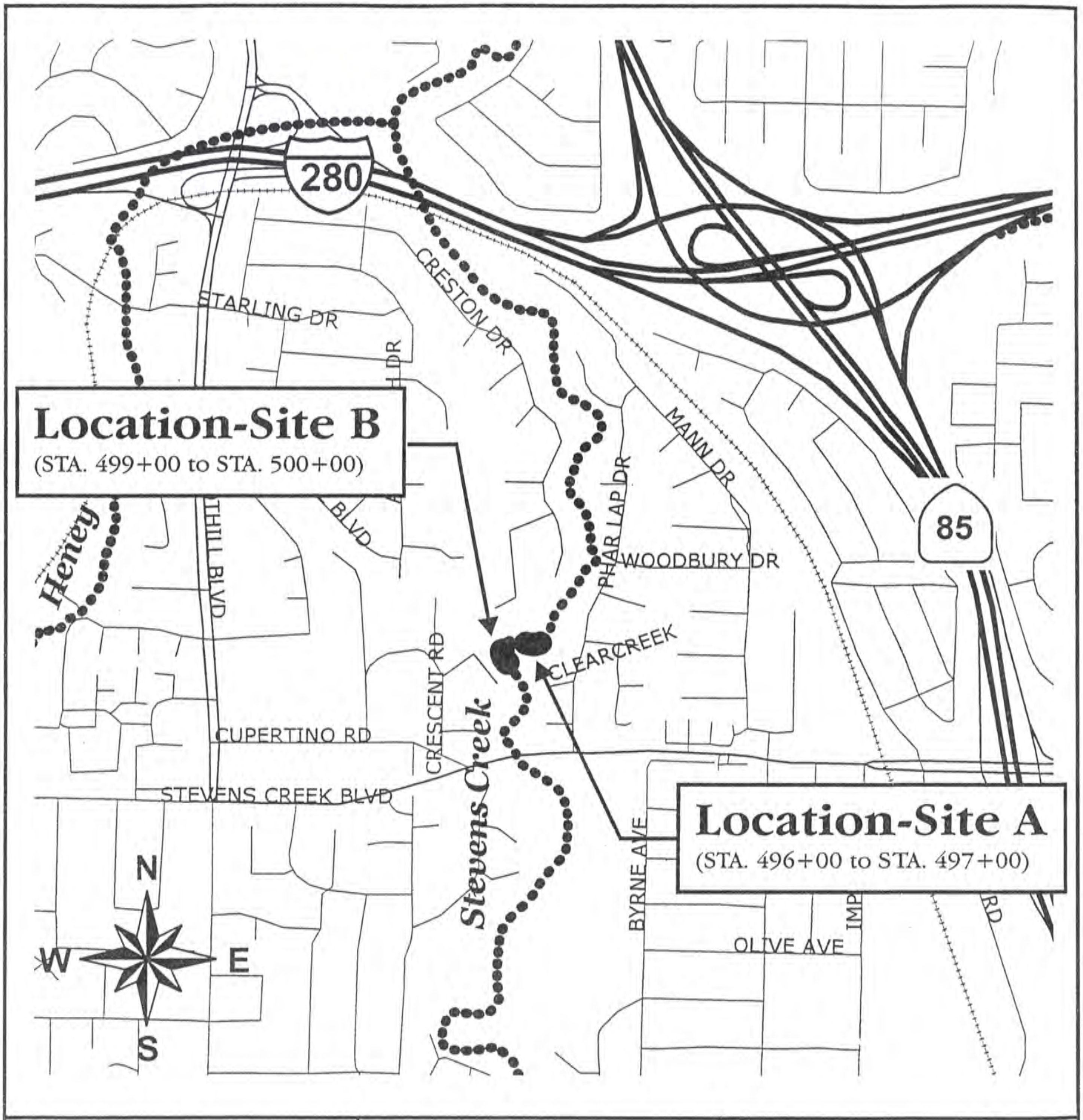


View 1 - Looking downstream at erosion repair site1. Erosion is threatening levee and sanitary sewer. Existing ramp to channel will be removed with project. *(San Tomas us McCoy, View1 (Site39).jpg)*



View 2 - Looking upstream at project area. Note exposed footings of existing sacked concrete slope protection. A series of vortex rock weirs will be installed to raise and stabilize the channel invert.
(San Tomas us McCoy, View2 (Site39).jpg)

Figure B-12a-Vicinity Map, Stevens Creek at Clearcreek Ct. (Sites A and B)



PURPOSE: To repair bank erosion in creek channels.

VICINITY MAP

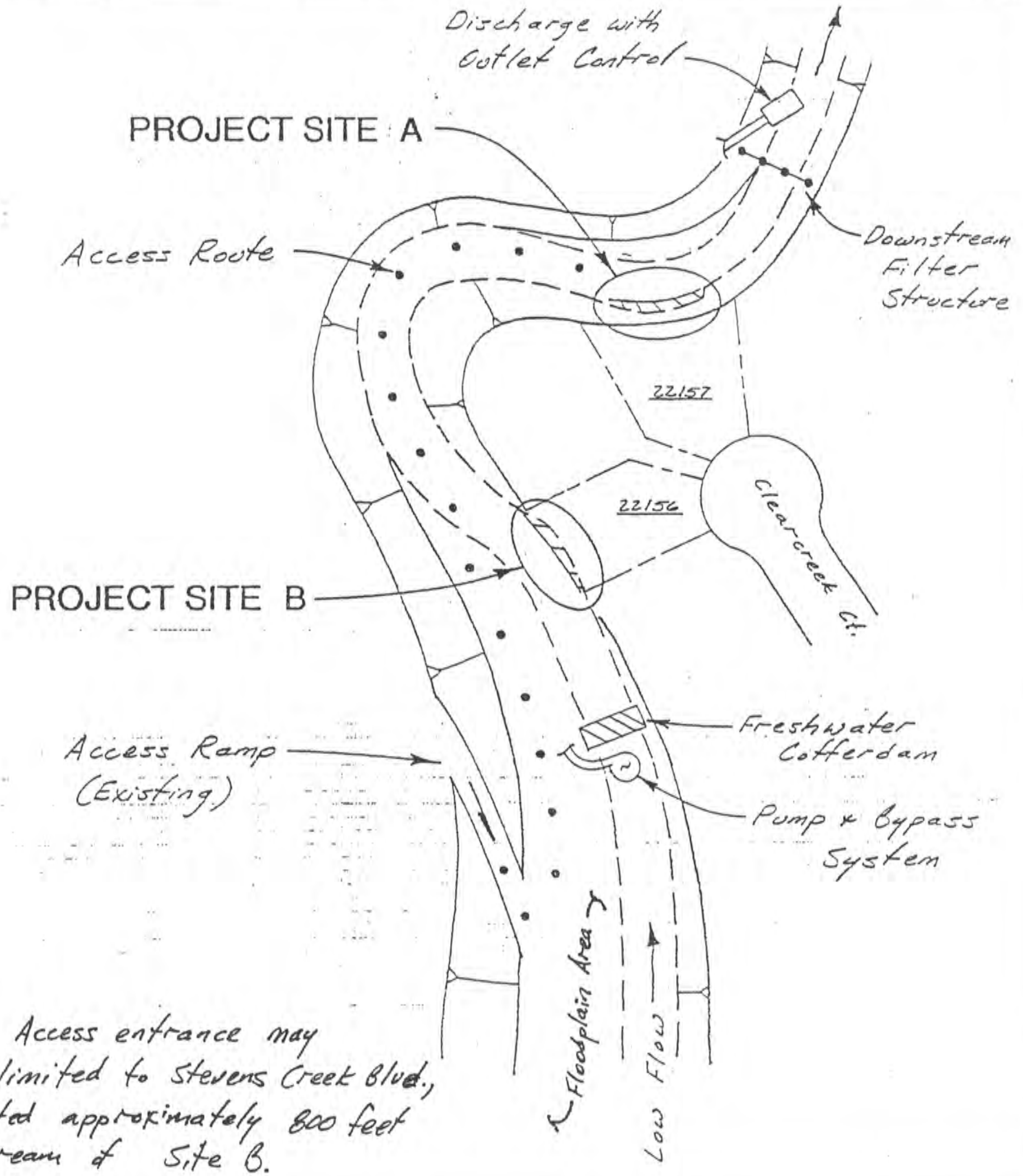
500 0 500 1000 Feet

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED BANK PROTECTION IN:
Stevens Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure B-12b-Plan View, Stevens Creek at Clearcreek Ct. (Sites A and B)



Note: Access entrance may be limited to Stevens Creek Blvd., located approximately 800 feet upstream of Site B.

PURPOSE: To repair bank erosion in creek channels.

PLAN VIEW

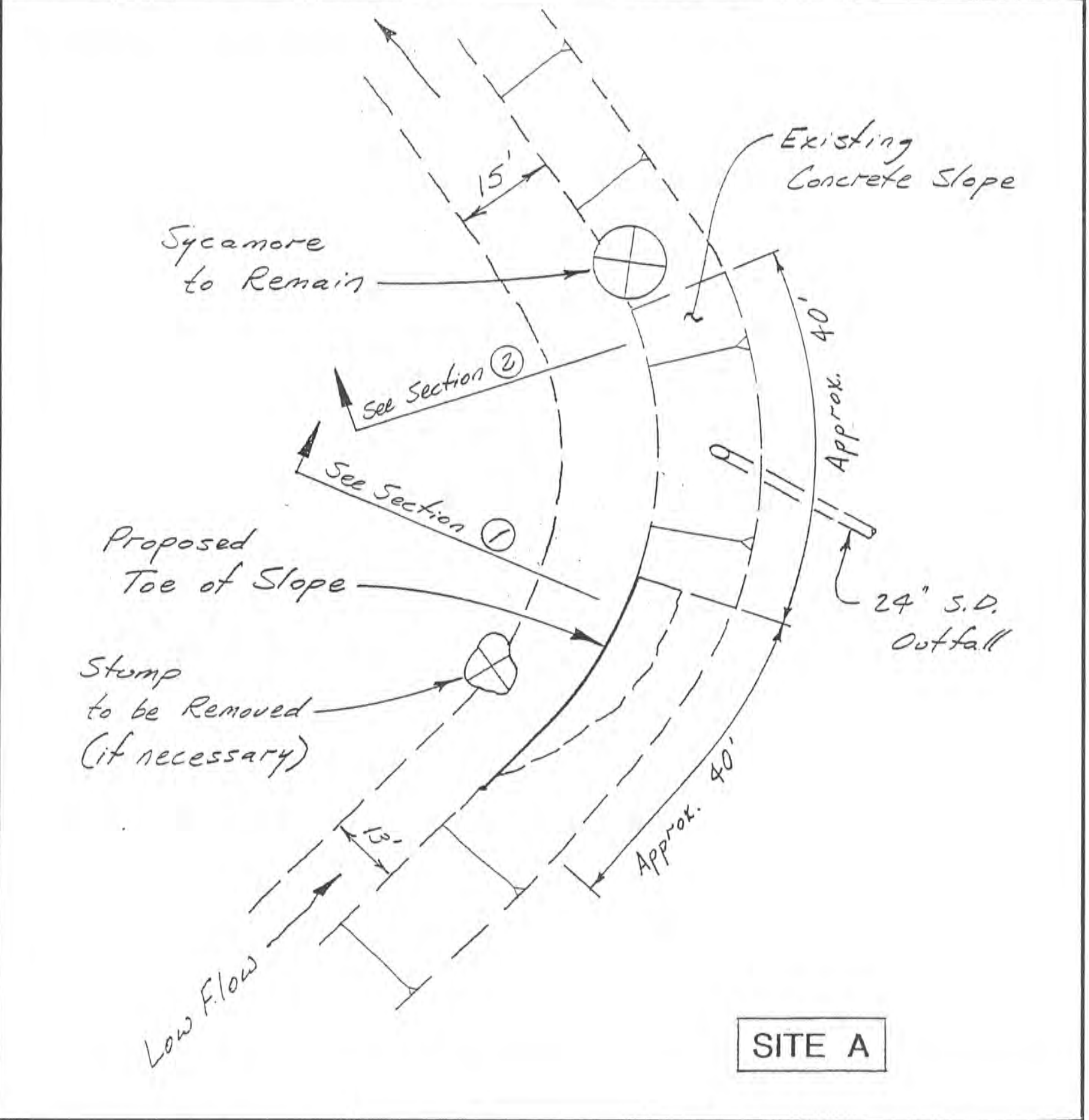
Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED BANK PROTECTION IN:
Stevens Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

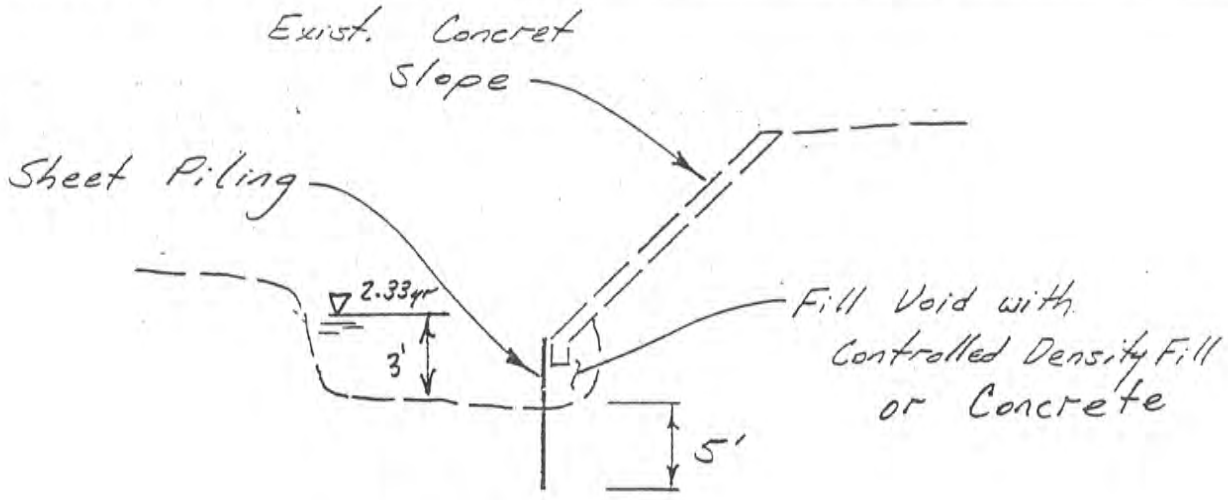
Figure B-12c-Plan View, Stevens Creek at Clearcreek Ct. (Site A)



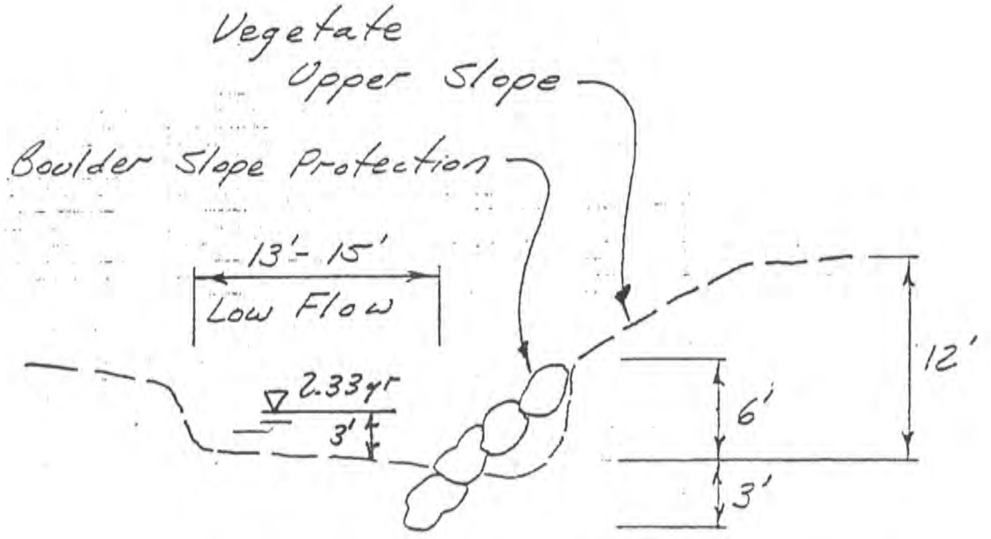
PURPOSE: To repair bank erosion in creek channels.	**PLAN VIEW** Not to scale Santa Clara Valley Water District 5750 Almaden Expressway San Jose, California 95118 www.scvwd.dst.ca.us	*PROPOSED BANK PROTECTION IN:* Stevens Creek *COUNTY OF:* Santa Clara *APPLICATION BY:* Santa Clara Valley Water District *DATE:* May 2001

04/27/2001 11:00 a.m.

Figure B-12d-Typical Section, Stevens Creek at Clearcreek Ct. (Site A)



SECTION ②

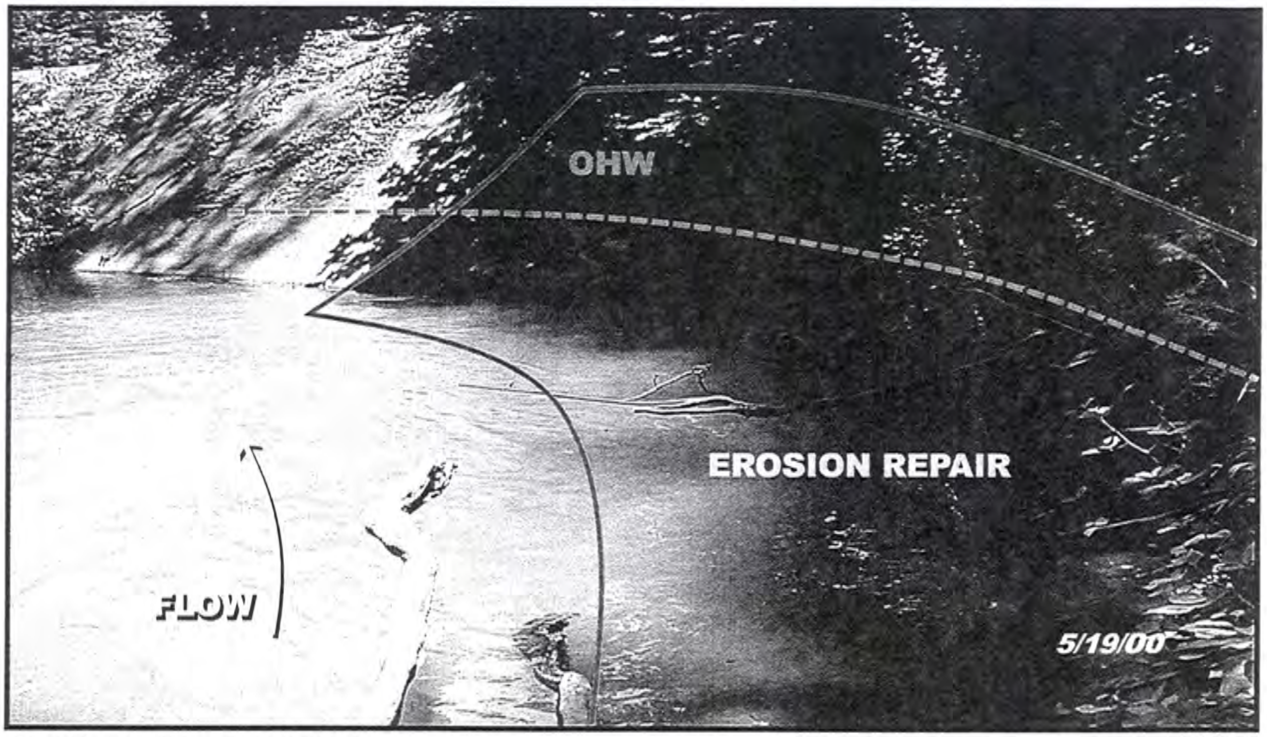


SECTION ①

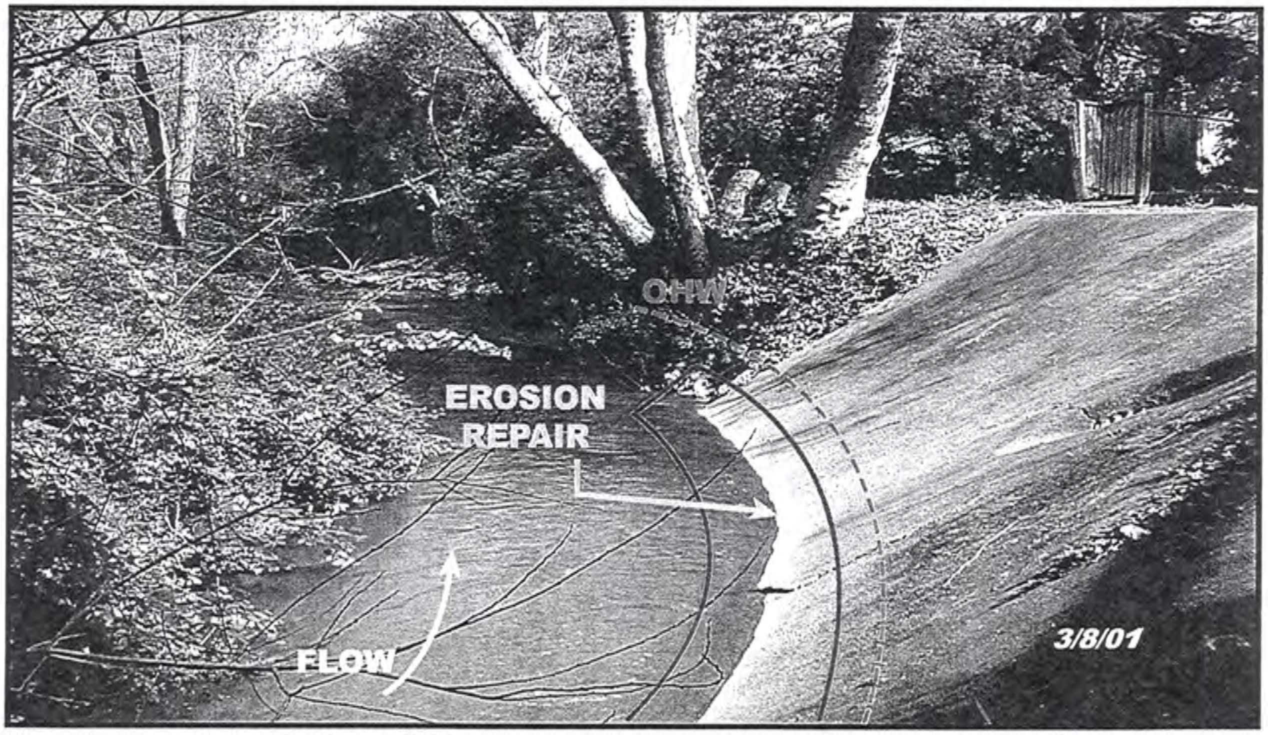
PURPOSE: To repair bank erosion in creek channels.	TYPICAL SECTION Not to scale Santa Clara Valley Water District 5750 Almaden Expressway San Jose, California 95118 www.scvwd.dst.ca.us	*PROPOSED BANK PROTECTION IN:* Stevens Creek *COUNTY OF:* Santa Clara *APPLICATION BY:* Santa Clara Valley Water District *DATE:* May 2001

04/27/2001 11:00 a.m.

Figure B-12g - Stevens Creek at Clearcreek Court (Site A).

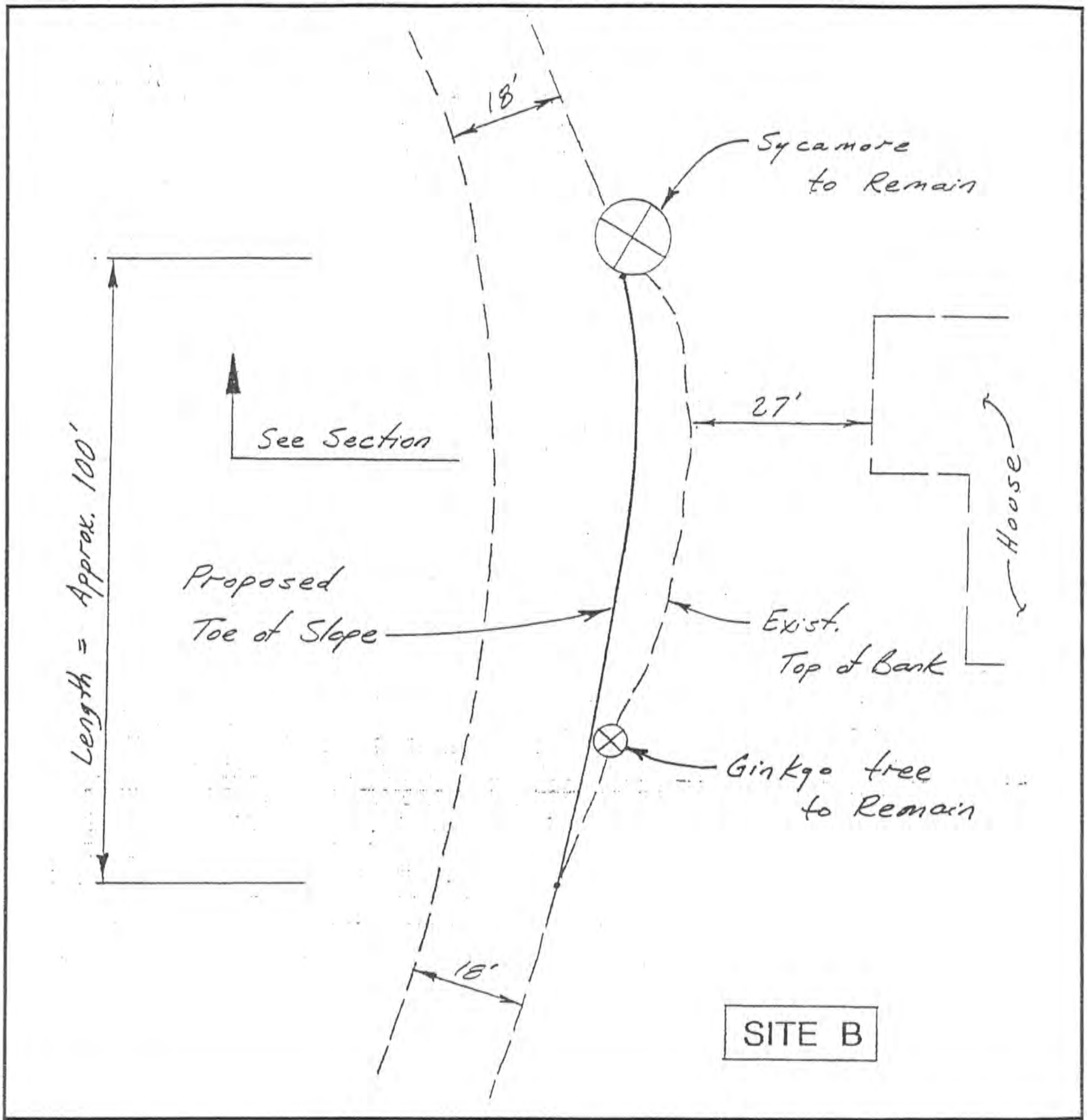


View 1 - Looking downstream at project area. Erosion is occuring immediately upstream of existing concrete slope protection. Further erosion will undermine slope.
(Stevens at Clearcreek (SiteA), View1 (Site40).jpg)



View 2 - The existing concrete slope protection at storm drain outfall is undermined. Channel scour is occuring below footing of the slope. *(Stevens at Clearcreek (SiteA), View2 (Site40).jpg)*

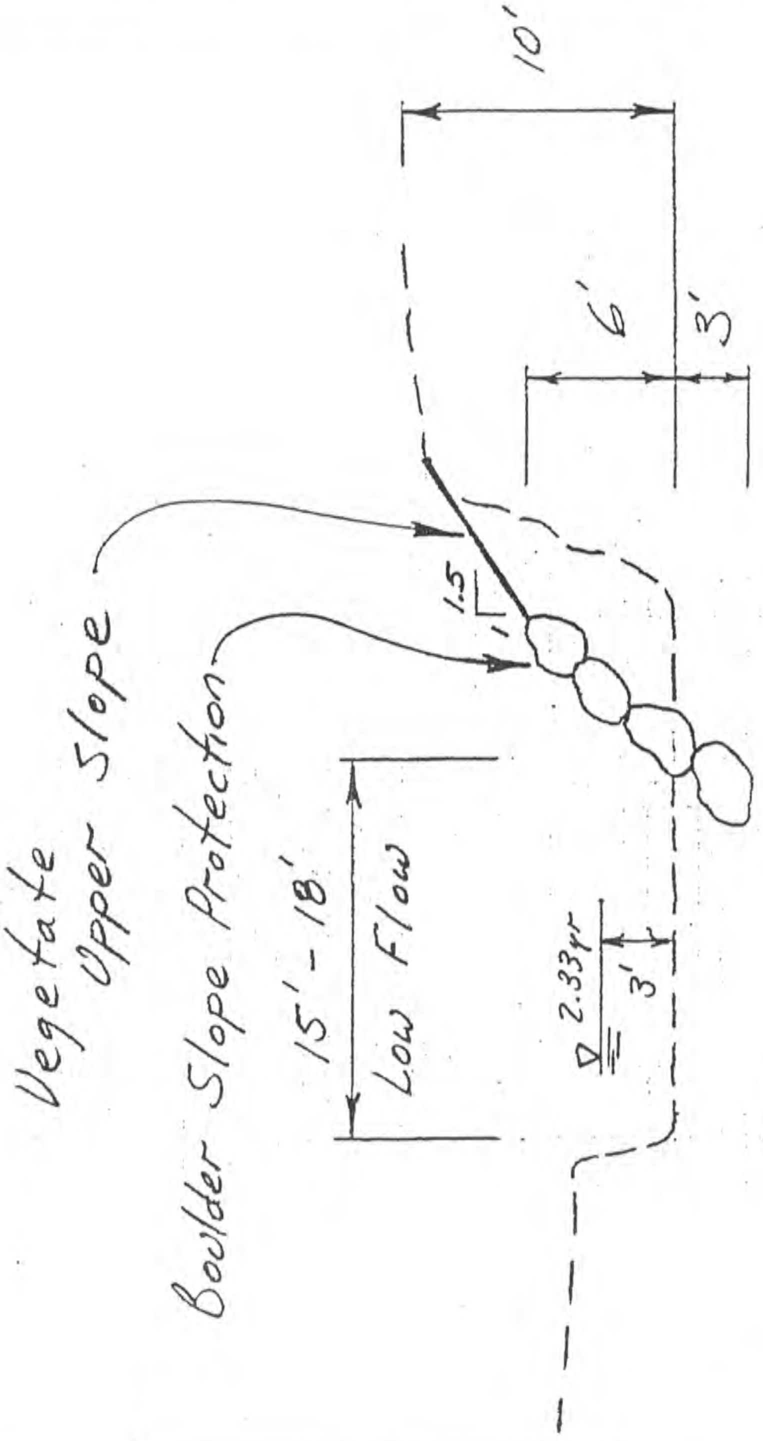
Figure B-12f-Plan View, Stevens Creek at Clearcreek Ct. (Site B)



PURPOSE: To repair bank erosion in creek channels.	**PLAN VIEW** Not to scale Santa Clara Valley Water District 5750 Almaden Expressway San Jose, California 95118 www.scvwd.dst.ca.us	*PROPOSED BANK PROTECTION IN:* Stevens Creek *COUNTY OF:* Santa Clara *APPLICATION BY:* Santa Clara Valley Water District *DATE:* May 2001

04/27/2001 11:00 a.m.

Figure B-12g-Typical Section, Stevens Creek at Clearcreek Ct. (Site B)



PURPOSE: To repair bank erosion in creek channels.

TYPICAL SECTION

Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED BANK PROTECTION IN:
Stevens Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

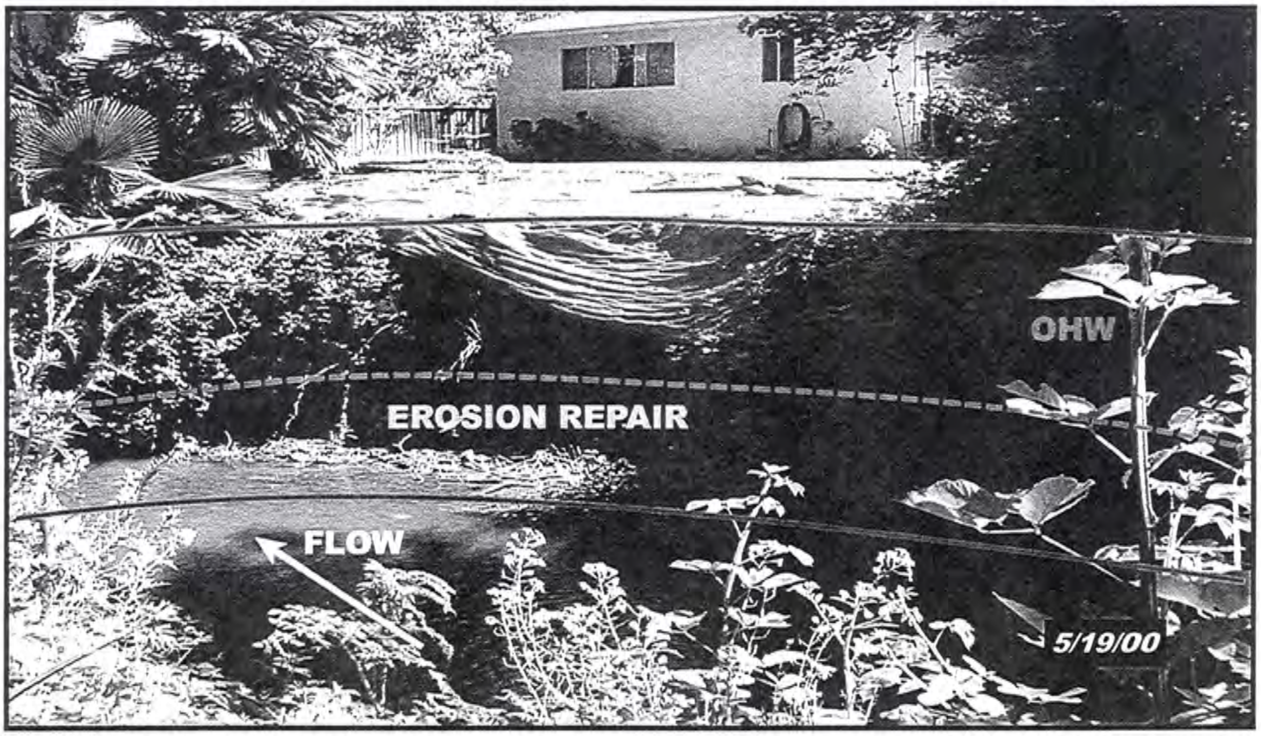
For Map, Plan, Typical Cross Section and Photos

of

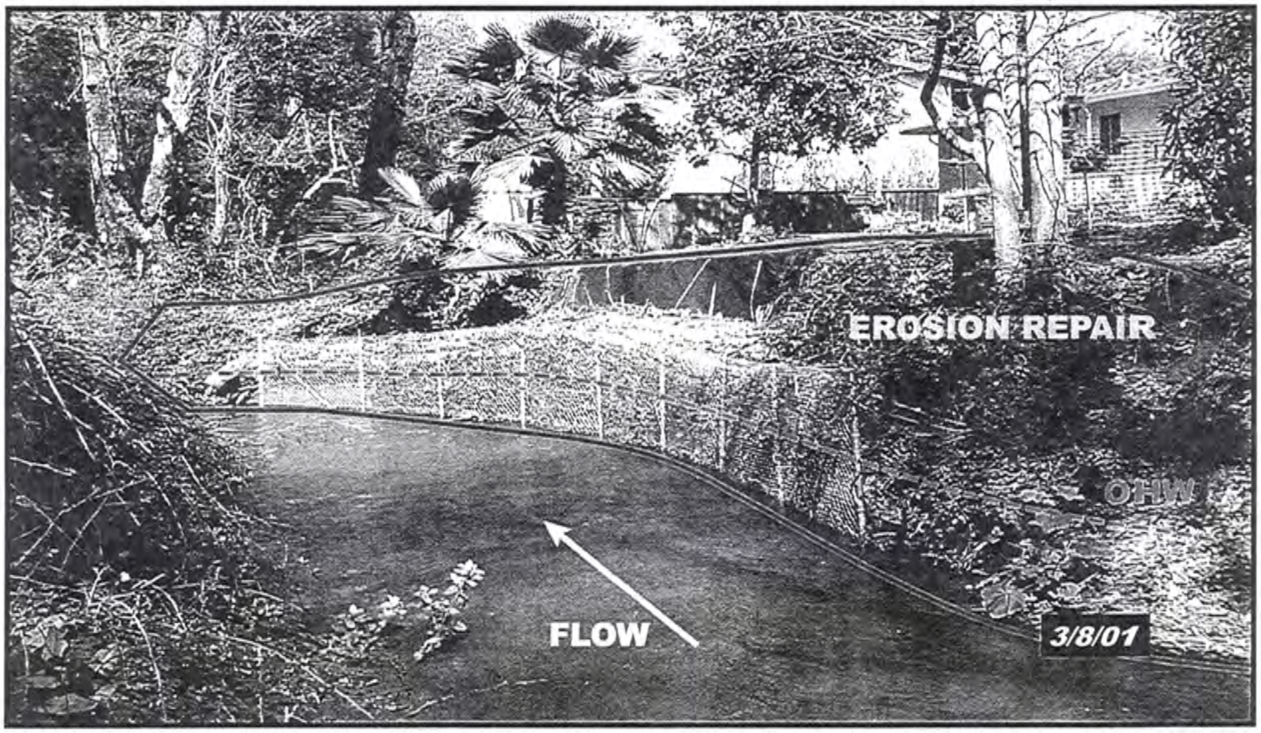
Project #13 Stevens Creek at Clearcreek Court (Site B)

Please refer to pages B-47 – B-54

Figure B-12h - Stevens Creek at Clearcreek Court (SiteB).

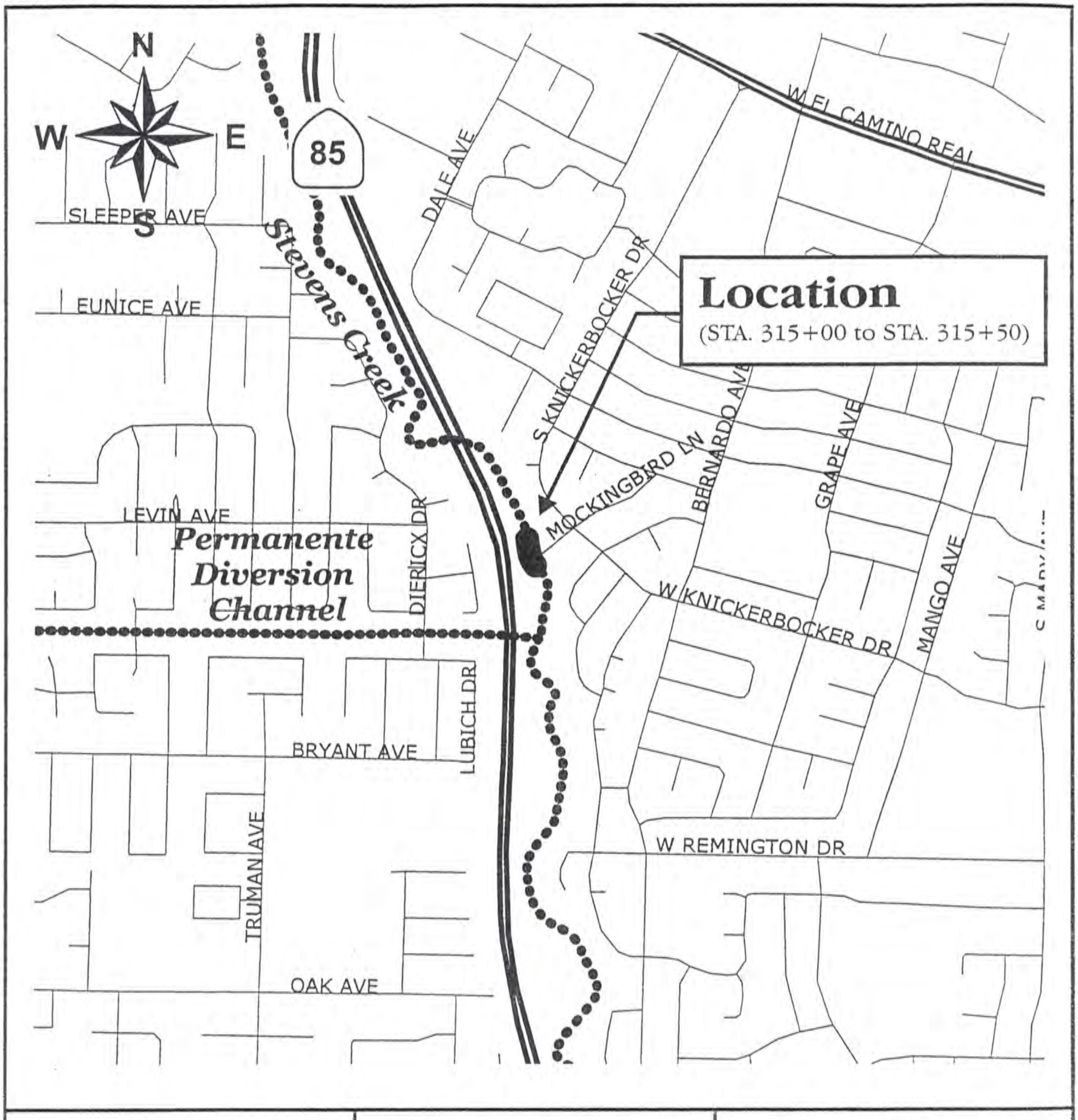


View 1 - Looking across stream at project area. Erosion has damaged private property of residential home. *(Stevens at Clearcreek (SiteB), View 1 (Site41).jpg)*



View 2 - Looking downstream at project area. Erosion is beginning to undermine large sycamore at downstream end of project. Interim measures shown in photo were installed in Summer 2000.
(Stevens at Clearcreek (SiteB), View2 (Site41).jpg)

Figure B-14a-Vicinity Map, Stevens Creek, at Highway 85



PURPOSE: To repair bank erosion in creek channels.

VICINITY MAP

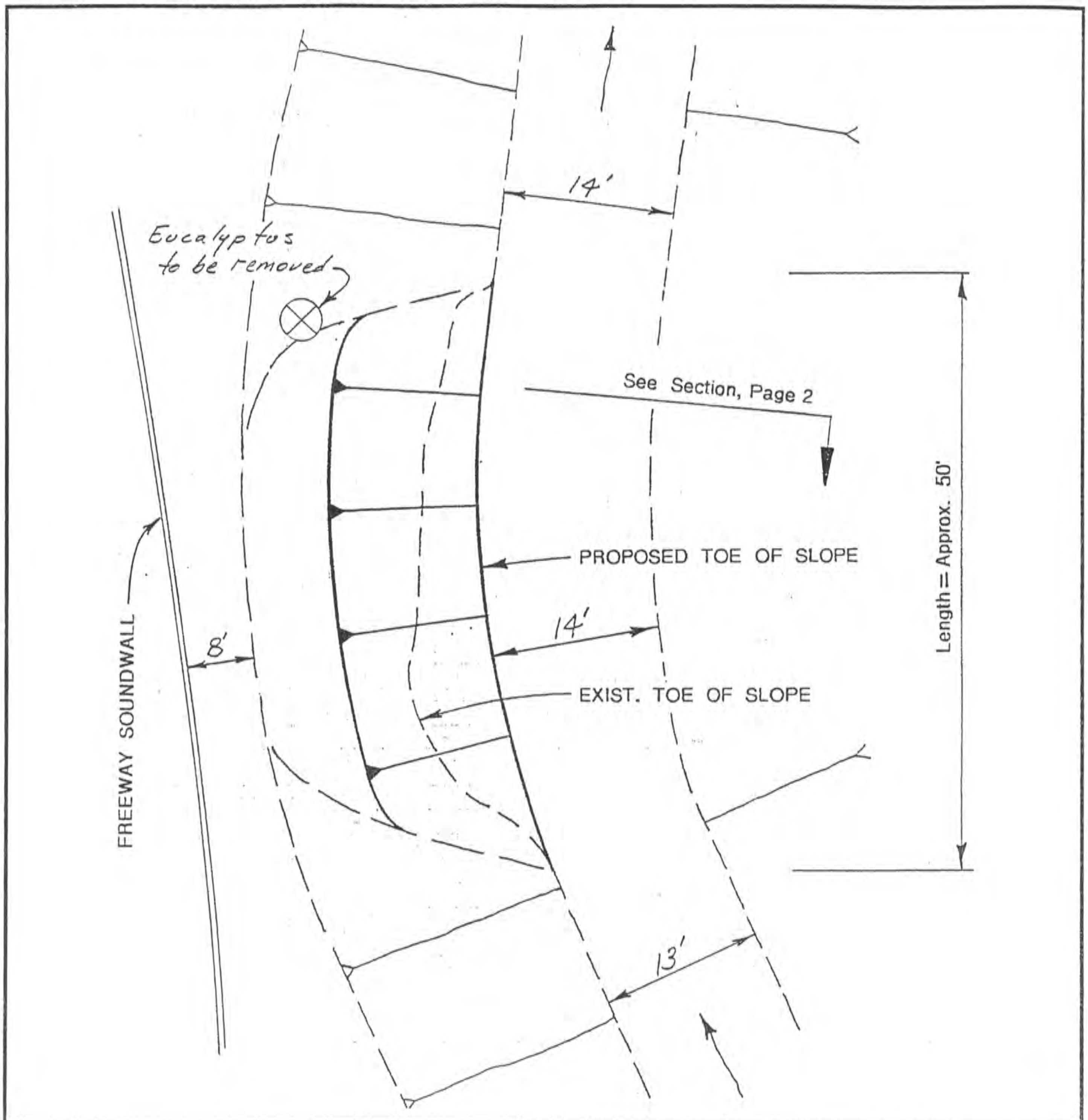
500 0 500 1000 Feet

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED BANK PROTECTION IN:
Stevens Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure B-14b-Plan View, Stevens Creek, at Highway 85



PURPOSE: To repair bank erosion in creek channels.

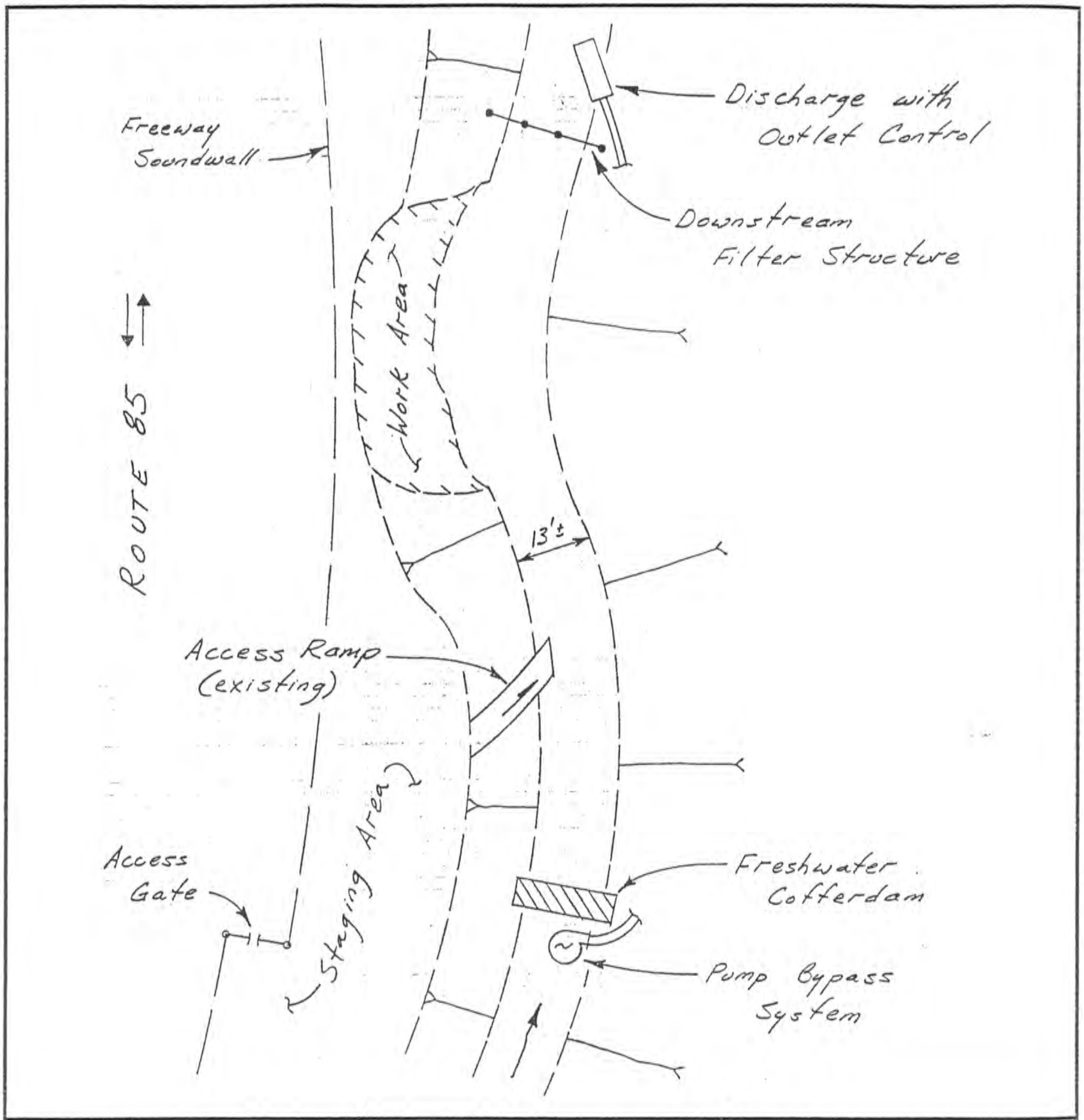
PLAN VIEW

Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED BANK PROTECTION IN:
Stevens Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

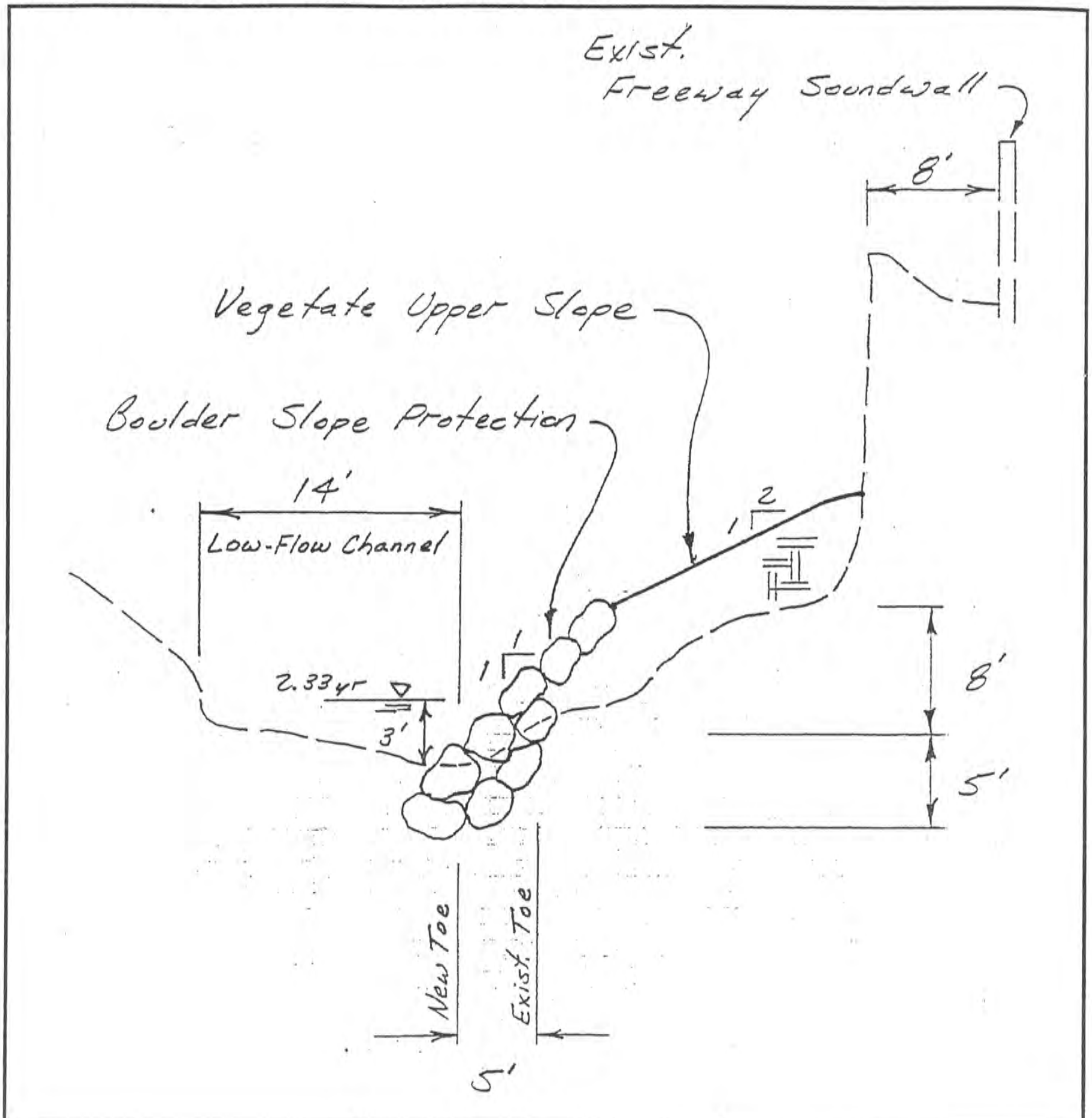
Figure B-14c-Plan View, Stevens Creek, at Highway 85



PURPOSE: To repair bank erosion in creek channels.	**PLAN VIEW** Not to scale Santa Clara Valley Water District 5750 Almaden Expressway San Jose, California 95118 www.scvwd.dst.ca.us	***PROPOSED BANK PROTECTION IN:*** Stevens Creek ***COUNTY OF:*** Santa Clara ***APPLICATION BY:*** Santa Clara Valley Water District ***DATE:*** May 2001

04/27/2001 11:00 a.m.

Figure B-14d-Typical Section, Stevens Creek, at Highway 85



PURPOSE: To repair bank erosion in creek channels.

TYPICAL SECTION

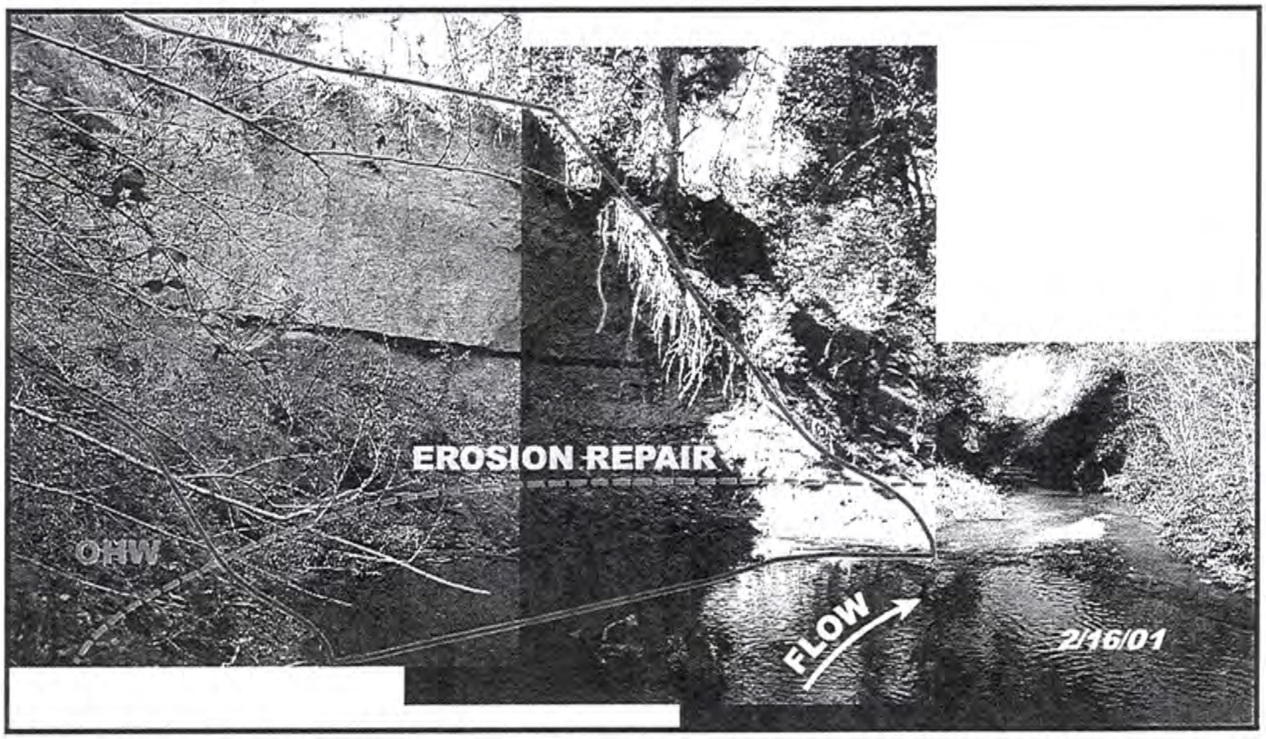
Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

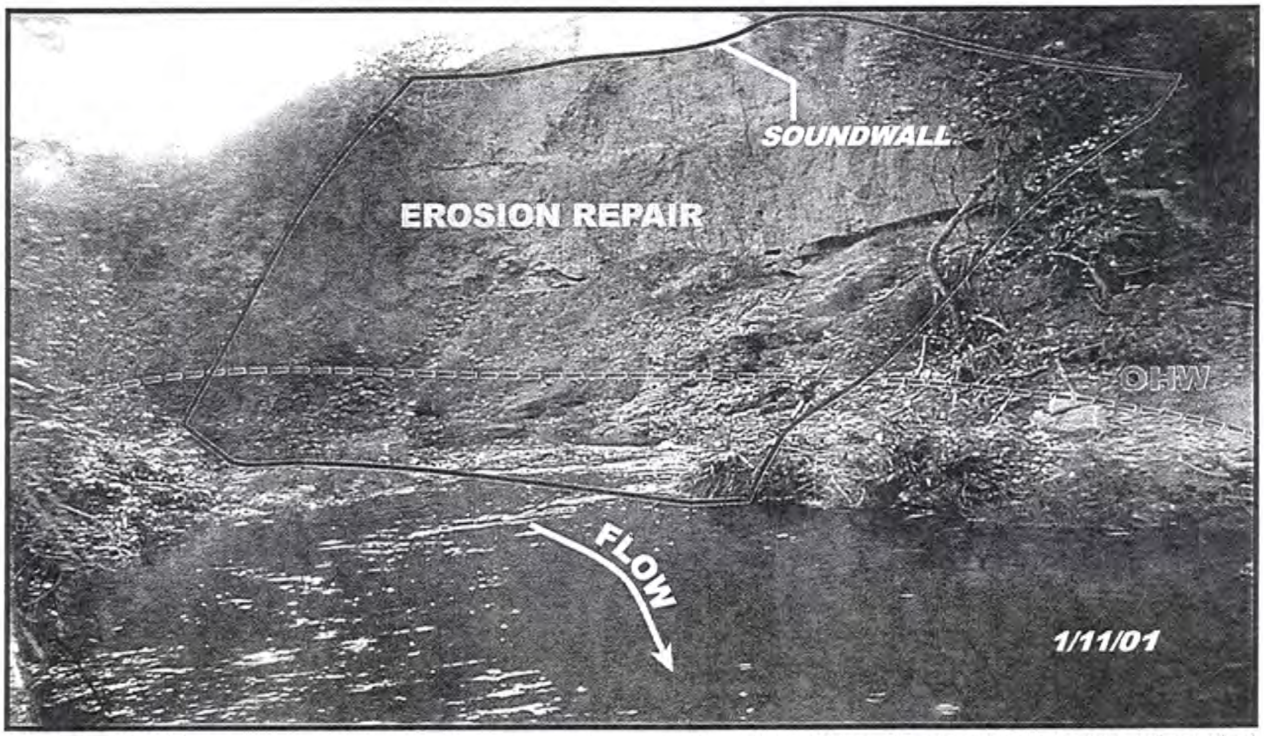
PROPOSED BANK PROTECTION IN:
Stevens Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure B-13e - Stevens Creek at Highway 85.

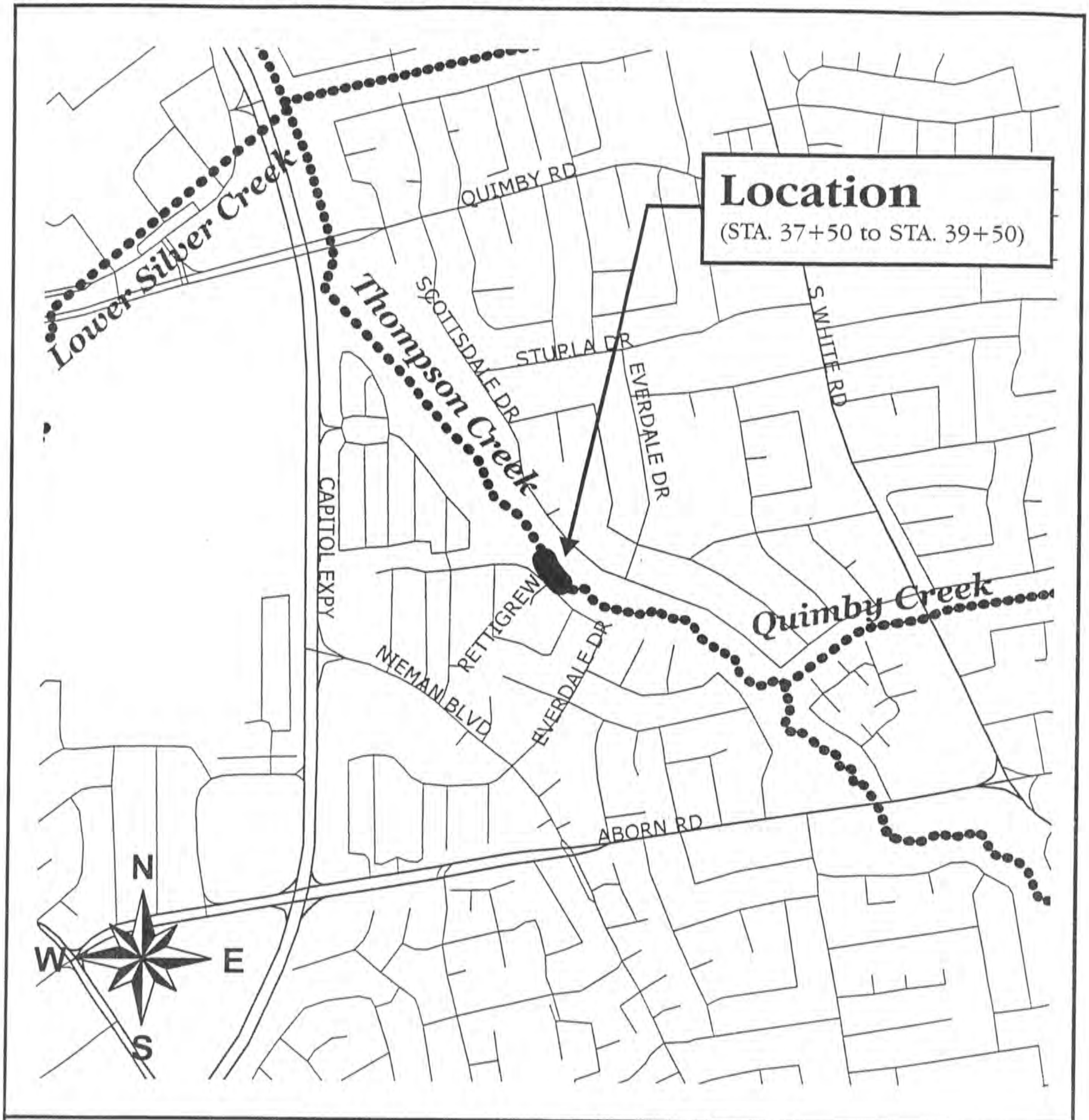


View 1 - Looking downstream at project area. The stream channel is approximately 30-feet deep at this location. *(Stevens at 85, View1 (Site42).jpg)*



View 2 - Looking upstream at project area. Note proximity of Highway 85 soundwall to top of eroded bank, approximately 8-feet. *(Stevens at 85, View2 (site42).jpg)*

Figure B-15a-Vicinity Map, Thompson Creek at Pettigrew Ct.



Location
(STA. 37+50 to STA. 39+50)

PURPOSE: To repair bank erosion in creek channels.

VICINITY MAP

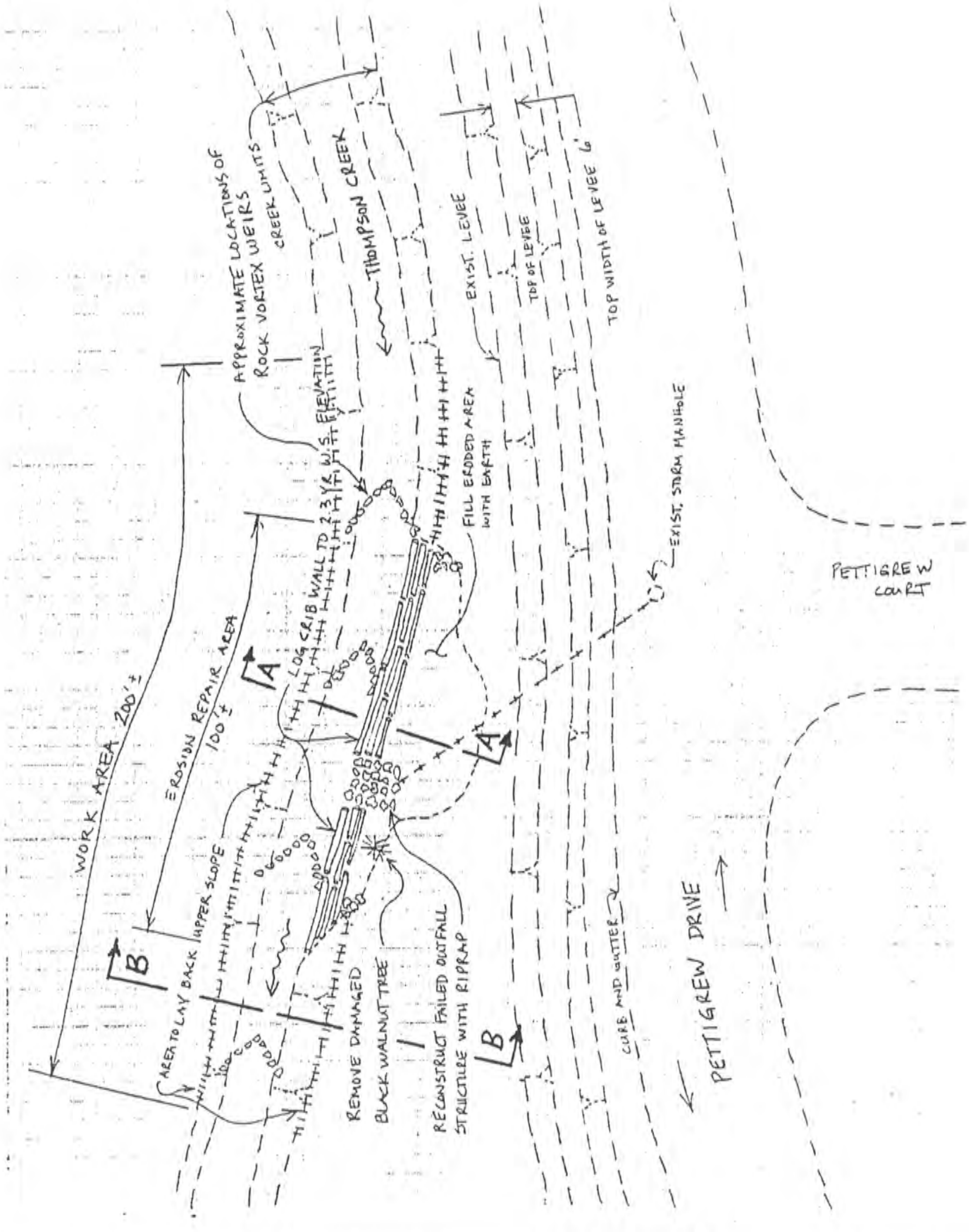
500 0 500 1000 Feet

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED BANK PROTECTION IN:
Thompson Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley
Water District
DATE: May 2001

04/27/2001 11:00 a.m.

Figure B-15b-Plan View, Thompson Creek at Pettigrew Ct.


APPROXIMATE LOCATIONS OF ROCK VORTEX WEIRS
CREEK LIMITS
THOMPSON CREEK
EXIST. LEVEE
TOP OF LEVEE
TOP WIDTH OF LEVEE 6'
LOG CRIB WALL TO 2.3 YR W.S. ELEVATION
FILL ERODED AREA WITH EARTH
EXIST. STORM MANHOLE
PETTIGREW COURT
WORK AREA 200'±
EROSION REPAIR AREA 100'±
A
A
B
B
AREA TO LAY BACK UPPER SLOPE
REMOVE DAMAGED BLACK WALNUT TREE
RECONSTRUCT FAILED OUTFALL STRUCTURE WITH RIPRAP
CURB AND GUTTER
PETTIGREW DRIVE

PURPOSE: To repair bank erosion in creek channels.

PLAN VIEW

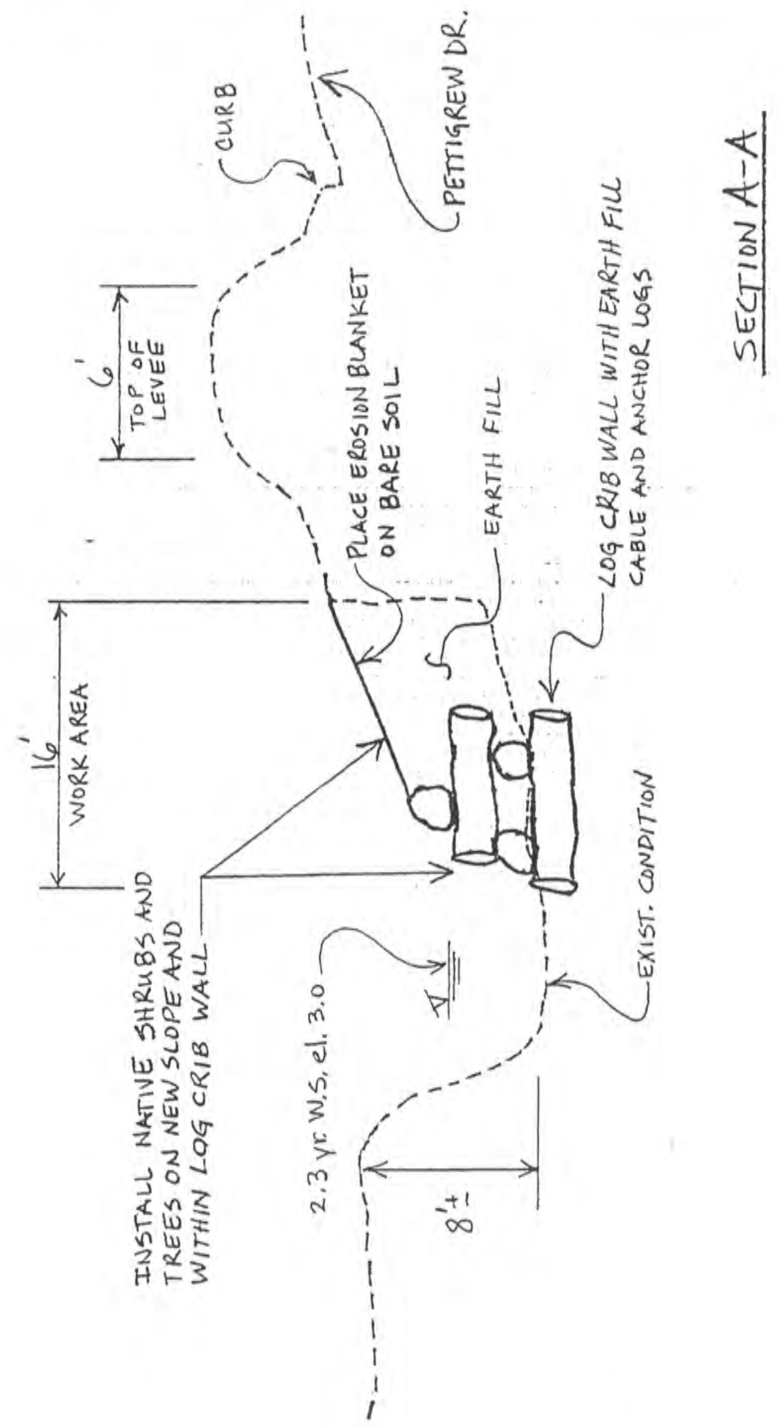
Not to scale

Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, California 95118
www.scvwd.dst.ca.us

PROPOSED BANK PROTECTION IN:
Thompson Creek
COUNTY OF:
Santa Clara
APPLICATION BY:
Santa Clara Valley Water District
DATE: May 2001

04/27/2001 11:00 a.m.

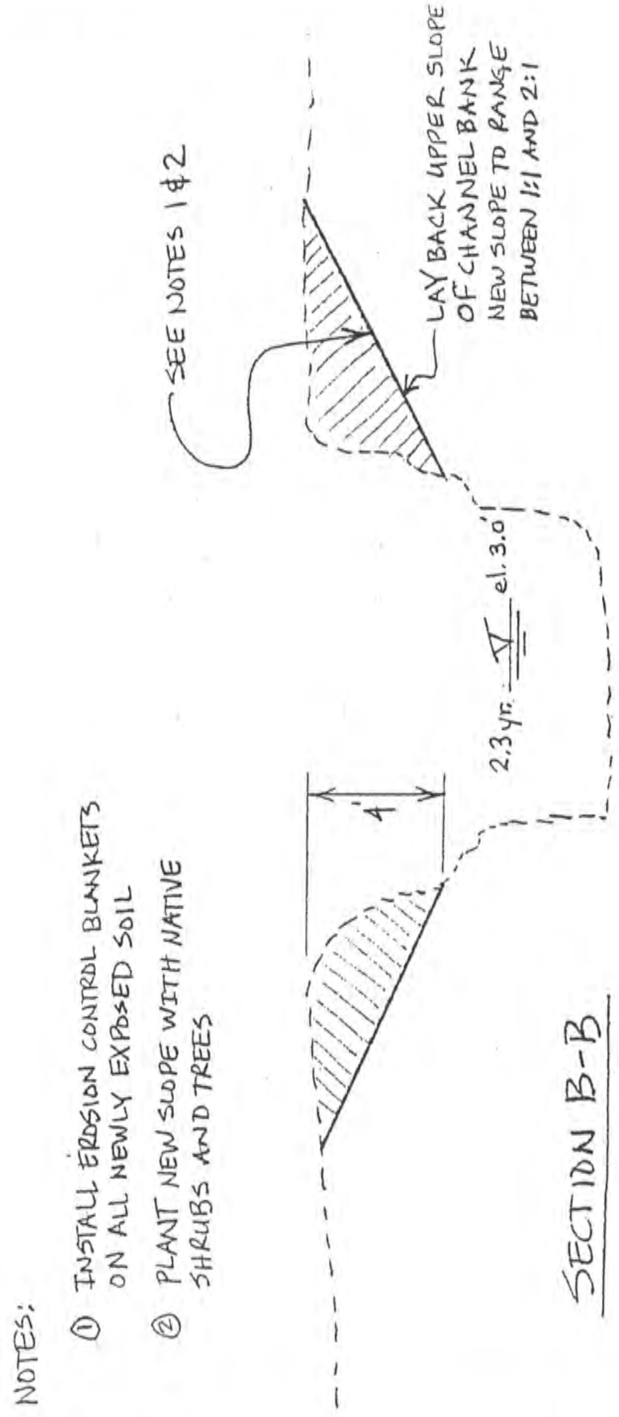
Figure B-15c-Typical Section, Thompson Creek at Pettigrew Ct.


SECTION A-A
PETTIGREW DR.
CURB
6'
TOP OF LEVEE
PLACE EROSION BLANKET ON BARE SOIL
EARTH FILL
LOG CRIB WALL WITH EARTH FILL CABLE AND ANCHOR LOGS
16'
WORK AREA
INSTALL NATIVE SHRUBS AND TREES ON NEW SLOPE AND WITHIN LOG CRIB WALL
EXIST. CONDITION
2.3 yr W.S. el. 3.0
8'±

PURPOSE: To repair bank erosion in creek channels.	**TYPICAL SECTION** Not to scale Santa Clara Valley Water District 5750 Almaden Expressway San Jose, California 95118 www.scvwd.dst.ca.us	*PROPOSED BANK PROTECTION IN:* Thompson Creek *COUNTY OF:* Santa Clara *APPLICATION BY:* Santa Clara Valley Water District *DATE:* May 2001

04/27/2001 11:00 a.m.

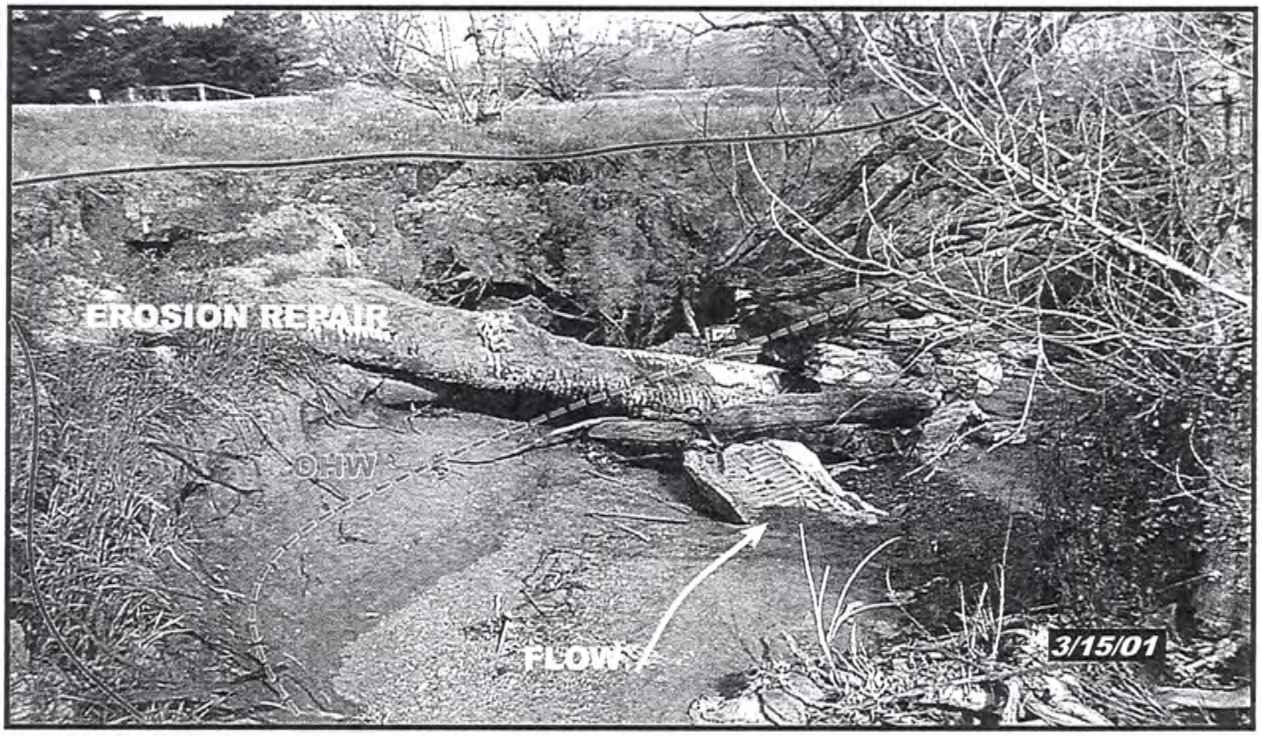
Figure B-15d-Typical Section, Thompson Creek at Pettigrew Ct.


NOTES;
① INSTALL EROSION CONTROL BLANKETS ON ALL NEWLY EXPOSED SOIL
② PLANT NEW SLOPE WITH NATIVE SHRUBS AND TREES
SEE NOTES 1 & 2
LAY BACK UPPER SLOPE OF CHANNEL BANK NEW SLOPE TO RANGE BETWEEN 1:1 AND 2:1
2.3 yr.
el. 3.0
4'
SECTION B-B

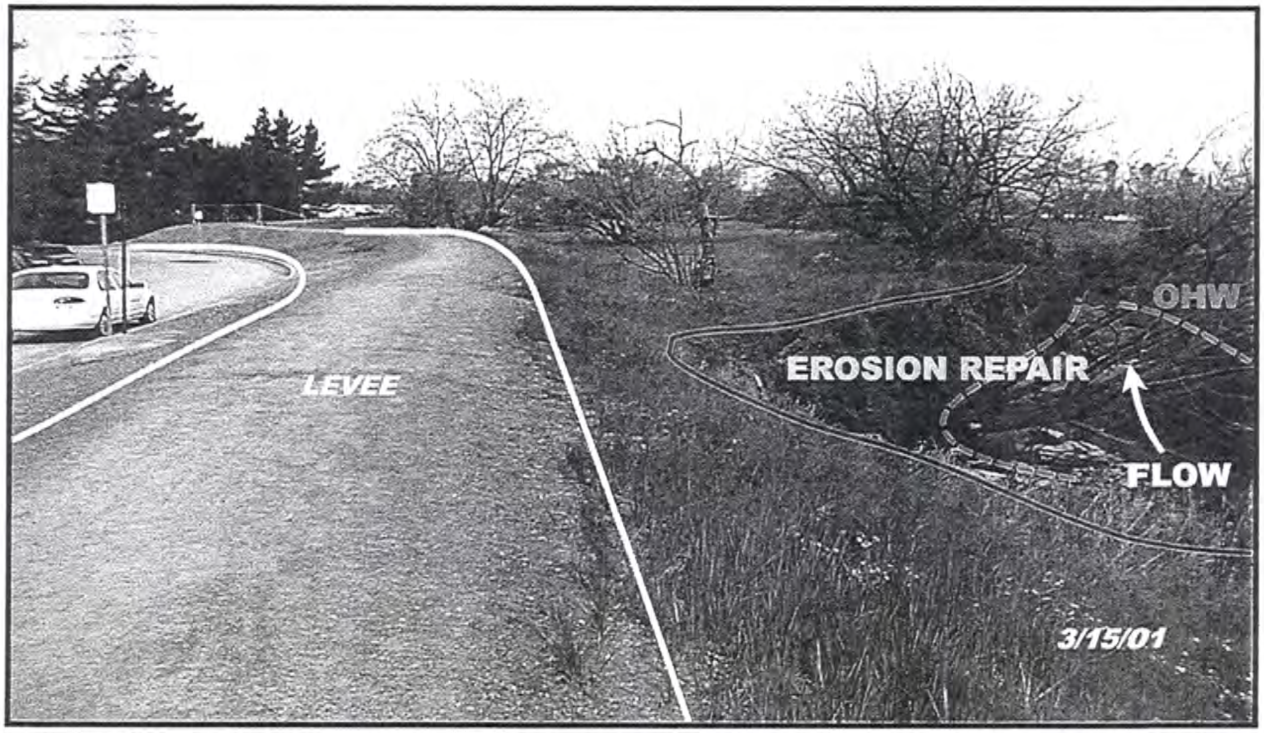
PURPOSE: To repair bank erosion in creek channels.	**TYPICAL SECTION** Not to scale Santa Clara Valley Water District 5750 Almaden Expressway San Jose, California 95118 www.scvwd.dst.ca.us	*PROPOSED BANK PROTECTION IN:* Thompson Creek *COUNTY OF:* Santa Clara *APPLICATION BY:* Santa Clara Valley Water District *DATE:* May 2001

04/27/2001 11:00 a.m.

Figure B-14e - Thompson Creek - downstream of Pettigrew Court.



View 1 - Looking downstream at erosion repair area. *(Thompson43a.jpg)*



View 1 - Looking downstream at erosion scour and existing levee. *(Thompson43b.jpg)*

APPENDIX C

WETLAND ASSESSMENT SUMMARY

Wetland Assessment of 2001 Sediment Removal and Erosion Repair Projects, Santa Clara Valley Water District,

Creek – Location	Summary of Wetland Conditions	Wetlands in Work Area and Location of OHWM
Erosion Repair Projects		
Calabazas Creek at Quarry Road	Sta. 643+00 to 643+30 Small patches of wetland fringe at toe of erosion site; vegetation dominated by *Equisetum arvense* and young *Salix lasiolepis* with lesser amounts of *Conium maculatum* and *Foeniculum vulgare.*	10 square feet OHW is 2' above thalweg as evidenced by scour and vegetation patterns.
Canoas Creek u/s of Blue Jay Dr.	Sta. 55+00 to 55+20 Wetland patches at toe of erosion site; vegetation co-dominated by *Equisetum arvense* and *Cyperus eragrostis,* with lesser amounts of *Conium maculatum* and *Foeniculum vulgare.*	11 square feet OHW is 1.5' above thalweg as evidenced by scour and vegetation patterns.
Canoas Creek u/s of Hillsdale Ave.	Sta. 85+00 to 100+00 Wetland patches at toe of two erosion sites as well as on small in-sediment deposits adjacent to work area; vegetation dominated by *Cyperus eragrostis.* with lesser amounts of *Rumex crispus, Typha* sp., and *Rorripa nasturtium-aquaticum.*	Left bank: 33 square feet Right bank: 41 square feet OHW is 1.5' above thalweg as evidenced by scour and vegetation patterns.
Coyote Creek u/s of Lower Penitencia Creek Confluence.	Sta. 454+00 to 455+50 Wetland patches occur upstream and downstream of erosion repair site (e.g., *Scirpus)*, yet none occurs within project site work area.	0 square feet OHW is 3+' above thalweg as evidenced by vegetation patterns (tidal area).
Guadalupe Slough at Baylands	Sta. 315+00 to 315+50 A band of wetland occurs at the base of the slope, averaging 5 feet in width. Vegetation is dominated by *Scirpus* sp. and *Helenium puberulum.*	250 square feet OHW is 4' above thalweg as evidenced by vegetation patterns (tidal area).

Creek – Location	Summary of Wetland Conditions	Wetlands in Work Area and Location of OHWM
Los Gatos Creek u/s of Lincoln Ave.	Sta. 115+00 to 117+00 Wetland patches at toe of failed gabion slope; wetlands limited to areas upstream and downstream of gabion. Vegetation co-dominated by *Rorripa nasturtium-aquaticum* and *Rumex crispus,* and lesser amounts of *Arundo donax.*	91 square feet OHW is 3' above thalweg (along creek upstream and downstream of large scour hole at erosion site). OHW determined from bank scour lines and vegetation patterns.
Lower Penitencia Creek d/s of Redwood Ave.	Sta. 67+00 to 70+15 No wetlands occur at this site.	0 square feet OHW is 2' above thalweg as evidenced by shelving and vegetation patterns.
Matadero Creek at Josina Ave.	Sta. 219+00 to 220+00 Creek banks vegetated with ivy; no wetlands occur at erosion site.	0 square feet OHW is 2.5' above thalweg as evidenced by shelving and vegetation patterns.
Rucker Creek, d/s Guibal Ave.	Sta. 57+30 to 58+30 Dense wetland in channel at erosion repair sites. Vegetation dominated by *Typha* sp. with lesser amounts of *Cyperus* sp. and *Xanthium* sp. Wetland averages 10 feet wide.	1,000 square feet OHW is 3.5' above thalweg as evidenced by shelving and vegetation patterns.
San Tomas Creek, u/s McCoy Ave.	Sta. 589+00 to 594+50 Small patch of wetland on sediment deposit at erosion repair sites; remainder of site is bare. Vegetation co-dominated by *Rumex crispus* and *Lolium multiflorum..*	4 square feet OHW is 2' above thalweg as evidenced by shelving and vegetation patterns.
Stevens Creek at Clearcreek Ct. (Site A and Site B)	Site A: Sta. 496+00 to 467+00 Creek banks are barren, no wetland vegetation present. Site B: Sta. 499+00 to 500+00 Creek banks are barren, no wetland vegetation present.	0 square feet OHW is 3' above thalweg as evidenced by shelving and vegetation patterns.
Stevens Creek at Highway 85	Sta. 315+00 to 515+50 Wetland patches occur at based of eroded slope. Vegetation co-dominated by *Rumex crispus, Helenium puberlum* and *Polygonum lapathifolium* with lesser amounts of *Salix lasiolepis.*	44 square feet OHW is 3' above thalweg as evidenced by shelving and vegetation patterns.

Creek – Location	Summary of Wetland Conditions	Wetlands in Work Area and Location of OHWM
Thompson Creek d/s Pettigrew Ct.	Sta. 37+50 to 39+50 Creek banks are barren, no wetland vegetation present.	0 square feet OHW is 3' above thalweg as evidenced by shelving.
E. Little Llagas Creek, San Martin Ave. to Church Avenue	Sta. 28+00 to 98+00 Wetlands limited to small patches in eroded sections. Vegetation dominated by *Lolium multiflorum.*	1,166 square feet OHW is 304 feet above thalweg.
Total Wetlands for Erosion Control Sites		**1,484 square feet (0.03 acre)**

Creek – Location	**Summary of Wetland Conditions**	**Wetlands in Work Area and Location of OHWM**
Sediment Removal Sites		
Adobe Creek, at Highway 101	Sta. 129+00 to 134+00 Freshwater marsh wetland vegetation occurs as patches of *Typha latifolia* and *Rorippa nasturtium-aquaticum* at Bayshore Road and beneath Highway 101. Giant reed (*Arundo donax*) also occurs along the right bank.	368 square feet OHW is 3-4' above thalweg as evidenced by shelving and vegetation patterns (tidal area).
Berryessa, u/s Milpitas Blvd to Calaveras	Sta. 55+00 to 87+00 Discontinuous patches of wetland on in-stream sediment deposits. Vegetation dominated by *Rorripa nasturtium-aquaticum, Typha, Veronica americanus,* and *Polygonum amphibium var. emersum*. Other species include *Xanthium strumarium* and *Epilobium ciliatum*. Sediment removal to retain wetland edge along low-flow channel.	Left Bank: 4,530 square feet Right Bank: 7,079 square feet Total: 11,609 square feet (0.27 acre) OHW is 3-4' above thalweg as evidenced by shelving andvegetation patterns.
Berryessa, Cropley St. to Sierra Creek Confluence	Sta. 223+50 to 234+00 Small patches of in-stream wetlands observed immediately d/s of Sierra Creek (2.5 square feet, dominated by *Lolium multiflorum*). Small patches of wetlands occur between Morrill and Cropley, primarily on in-stream sediments and along the toe of the channel. Wetland vegetation co-dominated by *Lolium multiflorum* and *Cynodon dactylon*, with lesser amounts of *Cyperus eragrostis*..	112.5 square feet (0.003 acre) OHW is 2.5' above thalweg as evidenced by shelving and vegetation patterns.

Creek – Location	Summary of Wetland Conditions	Wetlands in Work Area And Location of OHWM
Berryessa u/s and d/s of Piedmont Road	Sta. 283+50 to 290+50 Freshwater marsh wetland vegetation occurs within sediment basin/channel d/s of Piedmont. Vegetation is dominated by young *Salix* sp. and *Rorippa* sp., with lesser amounts of *Cyperus* sp., *Rumex crispus*, *Lolium multiflorum,* and *Epilobium ciliatum*. Wetland d/s of Piedmont measures approximately 25'x30 and 35x 20', totaling approx. 1,450 square feet. Freshwater marsh wetland vegetation occurs at small patch immediately u/s of Piedmont Road box culvert. Vegetation is dominated by *Rorippa* sp. and *Rumex crispus.* Wetland u/s of box culvert measures approximately 1'x15', totaling approx. 15 square feet.	D/s Piedmont: 1,450 square feet U/s Piedmont: 15 square feet Total is 1,465 square feet (0.03 acre) OHW is 2' above thalweg as evidenced by shelving and vegetation patterns.
Calabazas d/s Highway 101	Sta. 44+00 to 130+00 Freshwater marsh wetland vegetation occurs along both sides of low-flow channel; sediment removal to create a 32-foot wide low flow channel; portion of right bank vegetation to remain. Vegetation within sediment removal area is dominated by *Typha sp.* and *Scirpus californicus*, with lesser amounts of *Euthamia occidentalis, Rorripa nasturtium-aquaticum., Equisetum arvense, Polypogon monspeliensis* and *Rumex crispus.*	Left Bank: 50, 354 square feet (1.16 acre) Right Bank: 23,990 square feet (0.55 acre) Total: 1.7 acre OHW is 3-4' above thalweg as evidenced by shelving and vegetation patterns.
Calera Creek, u/s UPRR	Sta. 2+00 to 8+50 Wetland occurs on in-stream sediment deposits. Wetland immediately d/s of Milpitas Blvd. is dominated by *Typha sp.* (600 square feet). Wetlands to UPRR are dense mat of *Rorippa sp., Lolium multiflorum,* and *Typha sp.*	7,200 square feet (0.17 acre) OHW is 2' above thalweg as evidenced by shelving and vegetation patterns.

Creek – Location	Summary of Wetland Conditions	Wetlands in Work Area And Location of OHWM
Calera Creek, u/s Esquela Parkway	Sta. 40+00 to 40+40 Freshwater marsh wetland vegetation occurs within sediment basin area u/s of Esquela. Vegetation is dominated by *Equisetum arvense, Rorippa* sp., with lesser amounts of *Rumex crispus*, and *Lolium multiflorum.*	2,040 square feet (0.05 acre) OHW is 1.5' above thalweg as evidenced by shelving and vegetation patterns.
Canoas Creek Silt and Vegetation Removal	Wetlands occur in patches in channel bed and along toe. Vegetation dominated by *Typha sp., Rorippa nasturtium aquaticum, Lolium multiflorum* and *Polygonum amphibium var. emersum.*	6,487 square feet (0.15 acre) OHW is 2 feet above thalweg as evidenced by vegetation patterns and shelving.
Coyote Creek, u/s of Lower Penitencia Creek Confluence	Sta. 454+00 to 455+50 No wetlands in work area.	0 square feet MHWL is 3 feet above thalweg.
Flint Creek Debris Basin, u/s of Mt. Pleasant Road	Sta. 62+00 to 68+00 Majority of sediment removal area is vegetated with freshwater marsh wetland plant species. Dominant plant species are *Typha sp., Rumex crispus* and young *Salix sp.* Areas along outside edge of sediment removal area are dominated by upland grasses and were not considered wetland.	0 square feet OHW was not determined due to the configuration of the basin and lack of field indicators.
Guadalupe River, u/s Tasman to Montague Expwy.	Sta. 314+00 to 390+00 Four sediment removal areas are identified. These areas are dominated by *Scirpus robustus, Scirpus californica* and *Typha angustifolia*. Other species include *Rorippa nasturtium-aquaticum* and *Rumex crispus.*	68,790 square feet (1.58 acres) MHWL is 3-4 feet above thalweg, as evidenced by shelving and vegetation patterns
Los Coches Creek, d/s Highway 680 to Dempsey Ave.	Sta. 8+00 to 16+00 Discontinuous patches of wetland of in-stream sediment deposits. Vegetation dominated by *Rorripa nasturtium-aquaticum,* with lesser amounts of *Typha* and *Veronica americanus.*	592 square feet OHW is 2' above thalweg as evidenced by shelving and vegetation patterns.

Creek – Location	Summary of Wetland Conditions	Wetlands in Work Area And Location of OHWM
Matadero Creek, Highway 101 to Louis Ave.	Sta. 91+00 to 122+00 Freshwater marsh wetland vegetation occurs along both sides of low-flow channel; sediment removal to create a 32-foot wide low flow channel. Vegetation within sediment removal area is dominated by *Typha sp., Rorripa nasturtium-aquaticum* , and *Scirpus* sp., with lesser amounts of *Equisetum arvense,* and *Rumex crispus.*	Left Bank: 1,721 square feet Right Bank: 3,942 square feet Total: 5,663 square feet (0.13 acre) OHW is 2-3' above thalweg as evidenced by shelving and vegetation patterns.
Randall Creek, u/s Bret Harte Ave.	Sta. 29+00 to 29+50 Wetland occurs on in-stream sediment deposits. Vegetation co-dominated by *Rorippa nasturtium-aquaticum, Lolium multiflorum,* and *Cyperus eragrostis,* with lesser amounts of *Rumex crispus.*	60 square feet OHW is 2' above thalweg as evidenced by shelving and vegetation patterns.
Ross Creek, u/s Cherry Ave.	Sta. 30+00 to 30+50 Wetland occurs on in-stream sediment deposits and in small patches at edge of channel. Vegetation co-dominated by *Rorippa nasturtium-aquaticum., Cyperus eragrostis,* and *Lolium multiflorum,* with lesser amounts of *Rumex crispus.*	200 square feet OHW is 1.5' above thalweg as evidenced by shelving and vegetation patterns.
Rucker Creek, d/s Guibal Ave.	Sta. 57+30 to 58+30 Dense wetland in channel. Vegetation dominated by *Typha* sp. with lesser amounts of *Cyperus* sp. and *Xanthium strumarium.* Wetland averages 10 feet wide.	1,000 square feet OHW is 3.5' above thalweg as evidenced by shelving and vegetation patterns.
Sierra Creek, d/s Mauna Kea	Sta. 60+00 to 73+00 Discontinuous patches of wetlands immediately downstream of Mauna Kea, becoming denser in central portion of project area. Vegetation dominated by *Polypogon monspeliensis* and *Lolium multiflorum,* with lesser amounts of *Cyperus eragrostis* and *Rorippa nasturtium-aquaticum.*	7,012 square feet (0.16 acre) OHW is 1' above thalweg as evidenced by shelving and vegetation patterns.
Total Wetlands for Sediment Removal Sites		**180,455 square feet (4.14 acres)**

APPENDIX D

PUBLIC COMMENTS AND RESPONSES

APPENDIX D. PUBLIC COMMENTS AND RESPONSES

INTRODUCTION

This appendix consists of written comments on the District's 2001 Stream Maintenance Project Initial Study/Mitigated Negative Declaration, and the District's responses. The public review period was from May 3 through June 4, 2001. The District mailed copies of the Initial Study/Mitigated Negative Declaration and Notice of Intent to Adopt a Negative Declaration (NOI) to 26 agencies, organizations and individuals. The California Office of Planning and Research (State Clearinghouse) also distributed copies to State agencies. In addition, a NOI was published in the San Jose Mercury and filed with the County Clerk.

A list of agencies, organizations and individuals submitting written comments on the Initial Study/Mitigated Negative Declaration is provided below. The comment letters are attached, followed by responses immediately after each letter. Where appropriate changes have been made to the Initial Study/Mitigated Negative Declaration text based on these comments and responses; additions are underlined and deletions have ~~strikeouts~~.

AGENCIES, ORGANIZATIONS AND PERSONS SUBMITTING COMMENTS

1. California Governor's Office of Planning and Research
2. California Department of Transportation
3. Santa Clara County Streams For Tomorrow

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse

Gray Davis
GOVERNOR

Steve Nissen
DIRECTOR

June 4, 2001

LETTER 1

Jason Christie
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3686

Subject: 2001 Stream Maintenance Program
SCH#: 2001052013

Dear Jason Christie:

1-1 The State Clearinghouse submitted the above named Negative Declaration to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on June 1, 2001, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Terry Roberts

Terry Roberts
Senior Planner, State Clearinghouse

Enclosures
cc: Resources Agency

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
916-445-0613 FAX 916-323-3018 WWW.OPR.CA.GOV/CLEARINGHOUSE.HTML

Document Details Report
State Clearinghouse Data Base

SCH#	**2001052013**
Project Title	2001 Stream Maintenance Program
Lead Agency	Santa Clara Valley Water District

Type	**Neg** Negative Declaration
Description	Annual stream maintenance activities which include sediment removal in 17 channel segments and bank stabilization along 15 channel segments located within Santa Clara County.

Lead Agency Contact

Name Jason Christie
Agency Santa Clara Valley Water District
Phone 408.265.2607 x2702 *Fax*
email
Address 5750 Almaden Expressway
City San Jose *State* CA *Zip* 95118-3686

Project Location

County Santa Clara
City
Region
Cross Streets
Parcel No.
Township *Range* *Section* *Base*

Proximity to:

Highways Multiple
Airports
Railways
Waterways
Schools
Land Use Multiple

Project Issues	Aesthetic/Visual; Archaeologic-Historic; Flood Plain/Flooding; Noise; Vegetation; Water Quality; Wetland/Riparian; Wildlife; Cumulative Effects
Reviewing Agencies	Resources Agency; Department of Conservation; Department of Fish and Game, Region 3; Department of Parks and Recreation; San Francisco Bay Conservation and Development Commission; Caltrans, District 4; Regional Water Quality Control Board, Region 2; Department of Toxic Substances Control; Native American Heritage Commission; Public Utilities Commission; State Lands Commission

Date Received 05/03/2001 *Start of Review* 05/03/2001 *End of Review* 06/01/2001

Note: Blanks in data fields result from insufficient information provided by lead agency.

1. RESPONSES TO OFFICE OF PLANNING AND RESEARCH

1-1 Comment is noted; no response is necessary.

STATE OF CALIFORNIA - BUSINESS, TRANSPORTATION AND HOUSING AGENCY

GRAY DAVIS, Governor

DEPARTMENT OF TRANSPORTATION
P O BOX 23660
OAKLAND, CA 94623-0660
Tel: (510) 286-4444
Fax: (510) 286-5513
TDD (510) 286-4454

May 30, 2001

LETTER 2

SCL-Various
2001052013
SCL000128

Mr. Jason Christie
Santa Clara Valley Water District
5750 Almaden Expressway
Santa Clara, CA 95118

Dear Mr. Christie:

Initial Study and Mitigated Negative Declaration for the 2001 Stream Maintenance Project; Santa Clara Valley Water District

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the proposed project. We have examined the above-referenced document and have the following comments to offer:

2-1 We are concerned about the impact that heavy equipment used for this project may have on State highways. We recommend that heavy equipment, especially sediment removing trucks, access the site from local roadways and not directly from State facilities. The impact to fast moving vehicles on State highways, therefore, will be minimized. If direct access from State roads cannot be avoided, we recommend a Traffic Management Plan (TMP) be prepared for our review. In addition, in areas close to State facilities, construction work during peak hours should be avoided if possible.

Should you require further information or have any questions regarding this letter, please call Haiyan Zhang of my staff at (510) 622-1641.

Sincerely,

HARRY Y. YAHATA
District Director

By Jean CR Finney

JEAN C. R. FINNEY
District Branch Chief
IGR/CEQA

2. RESPONSES TO CALTRANS

2-1 The project activities are short-term maintenance activities at approximately 30 different locations throughout Santa Clara County. As discussed in the IS/MND, daily traffic volumes will are not expected to be significant in relation to vicinity traffic volumes, and the project will not result in a permanent increase in traffic. The additional short-term trips resulting from the project will be spread out throughout the County, will be of limited duration, and will not result in significant impacts at any one location. The majority of the trips will be during off-peak hours.

The contractor will be responsible for selecting a route for heavy equipment, although it is expected that local roads and District access roads will be utilized. Encroachment permits will be obtained from Caltrans for any projects that might require direct access from State roadways. Of all the 2001 SMP projects, this would apply only to the bank protection project on Stevens Creek at Highway 85. As indicated in the IS/MND, an encroachment permit will be required with implementation of traffic control per Caltrans standards, which would include preparation of a Traffic Management Plan as suggested in this comment.

SANTA CLARA COUNTY
STREAMS FOR TOMORROW
Post Office Box 1409
San Martin, California 95046

June 4, 2001

LETTER 3

HAND DELIVERED

Mr. Jason Christie
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118

Dear Mr. Christie:

2001 Stream Maintenance Project (SMP) Draft Initial Study and Mitigated Negative Declaration; Dated May 2001

We have the following comments on subject Draft Initial Study and Mitigated Negative Declaration (IS/MND) for your consideration in preparing the Final IS/MND.

3-1 1. Mitigated Negative Declaration; Finding Number 2:
- The tidal wetland impact figure should be 1.59 acres, not 1.52.
- The statement "full 1.00 acre" should read 0.50 acre.

3-2 2. Page 2-45; Table 4: Sediment removal site 9 and bank stabilization site 4 represent the work site on Coyote Creek upstream from Lower Penitencia Creek. Since Coyote Creek is a steelhead stream, work should be conducted outside the steelhead migration season, which is the intent of BMP 20. Therefore, BMP 20 should be designated in the Table as applying to these two sites (#9 for sediment removal and #4 for bank stabilization).

3. Page 2-45; Table 4: BMP 20 also should be designated for bank stabilization site 6 because "Guadalupe Slough at Baylands" is identified as a potential steelhead location in Table 5.

3-3 4. Page 3-1; Section 3.2 Environmental Factors Potentially Affected: The environmental factors summary has not been completed. Checklist entries support checking the boxes for "Biological Resources" and "Mandatory Findings of Significance" because the Potentially Significant Unless Mitigation Incorporated designation is used in the checklist and mitigation is provided for both of these environmental factors. As presented, Section 3.2 does not correctly characterize the checklist environmental impacts assessment.

3-4 5. Page 4-5; Section 4.4.a Biological Resources: The IS/MND fails to discuss potential impacts to Chinook salmon, a California Species of Special Concern. The Draft EIR for the Stream Maintenance Program states "Chinook salmon presently use the lower portions of Coyote Creek, the Guadalupe River, and occasionally Los Gatos Creek for spawning" (page IV-B-20). The 2001 SMP has projects on all three streams. A discussion of potential SMP impacts on Chinook salmon must be added to Biological Resources Section 4.4.a. [See Comment 11 below regarding lack of impact avoidance BMP for Chinook salmon]

3-5 6. Page 4-6, Table 5: The column for "Fish Species" and Footnote (1) must identify potential presence of Chinook salmon, such by using the designation "C" for Chinook salmon.

7. Page 4-6, Table 5: The Table needs Footnote (3).

3-6 8. Page 4-7 to 8; Steelhead Trout: The discussion fails to include the erosion repair project at Guadalupe Slough at Baylands (Site 6) which is designated as a potential steelhead trout site in Table 5. Either Table 5 is in error and should be corrected OR this site should be included in the steelhead trout discussion.

3-7 9. Page 5-2; Section 5.2 Background: The third sentence in paragraph two should be corrected and augmented for clarification to read: "Tidal mitigation requirements to date total 12.59 acres (see Table 7 in Subsection 4.17)*, and 14.2 acres with the 2001 SMP*." This would follow the same information format as paragraph three.

3-8 10. The IS/MND repeatedly states that the District has provided wetland mitigation for the impacts of past stream maintenance projects. No mitigation has yet been provided for the vetland impacts that occurred from 1996 through 2000, as summarized in Table 7. Regulatory requirements exist for the District to provide compensatory wetland mitigation, ɩut no actual mitigation has been provided to date. IS/MND statements that the District has provided wetland mitigation are a misrepresentation.

3-9 11. Page 2-38; Table 3, Proposed BMP Number 20: For past annual Stream Maintenance Projects, the District has employed a fishery and aquatic resources protection BMP that avoided or minimized adverse impacts to anadromous salmonids by limiting work to the low-flow months outside the migration and spawning seasons. For example, Year 2000 SMP BMP # 17 stated: "Work within anadromous salmonid streams is generally limited to the period of July 1 to October 15" (2000 SMP Final MND, page 2-20). This work period is substantially outside the primary migration and spawning seasons of both steelhead trout and Chinook salmon and, therefore, affords significant protection for both species.

Proposed BMP Number 20 makes three significant and adverse changes to the past District impact avoidance and minimization BMP: (1) the BMP excludes application to Chinook salmon streams and is limited to steelhead streams; (2) the general work period in steelhead streams is extended to include July 1 to December 15; and (3) the work restriction is limited in application only to "the use of heavy equipment in the channel". These changes constitute substantial weakening of the original impact avoidance and minimization intent and benefits of the BMP.

This major BMP change was not discussed at the February 26, 2001 Stream Maintenance Lessons Learned Meeting.

The proposed BMP 20 offers no protection for fall-run Chinook salmon, a California Species of Special Concern. Migratory adult salmon may be present in local streams from late June through early January (Figure 4.14-2, Final EIR/EIS, Upper Guadalupe River Flood Control Project), with October through December being most important for migration and spawning. There is no BMP to avoid impacts to Chinook salmon by conducting SMP work outside the salmon fall and early-winter migration and spawning seasons. This is a major, fatal-flaw deficiency in the District's approach of avoiding and minimizing impacts by incorporating BMPs into SMP design and procedures. The proposed steelhead avoidance BMP (proposed BMP 20) does not provide ancillary protection for fall-run salmon.

The period of October 15 to December 15 is the start of the wet season. Fall storm events cause streamflow increases and pulses and water temperature changes which, in turn, stimulate fall steelhead smolt migration. Extending the work period from October 15 to the proposed December 15 would allow work within the fall steelhead smolt migration season. This would be contrary to the basic intent of the BMP, which is to avoid the steelhead migration and spawning seasons.

3-9 Ongoing work in stream channels after October 15 during fall storms could cause siltation, contamination, and other adverse water quality impacts to project streams and associated deleterious impacts to stream biological resources, including fall steelhead smolts and fall-run adult Chinook salmon. Fall SMP projects that include barriers to fish migration (such as tidal cofferdams) could adversely effect fall steelhead smolt migration and migrating adult salmon.

Applying the BMP only to "the use of heavy equipment in the channels" would allow SMP work in the channels at any time of year, including during steelhead migration and spawning, as long as "heavy equipment" was not needed "in the channel" to accomplish the SMP work. To achieve the impact avoidance and minimization intent of the BMP, the "heavy equipment" qualification must be deleted from proposed BMP 20.

Proposed BMP 20 must be corrected to reflect the steelhead **and** Chinook salmon impact avoidance intent of the original BMP, as developed in consultation with agencies and the public during the process of defining and approving past annual stream maintenance projects. **For protection of steelhead trout, a threatened species, and fall-run Chinook salmon, a California Species of Special Concern, BMP 20 should be corrected to read: "Work within steelhead and Chinook salmon streams is generally limited to the period of July 1 to October 15".**

Thank you for the opportunity to comment on the subject IS/MND. Please send us a copy of the draft Final IS/MND and notice of adoption hearing. If you have questions about our comments and recommendations, please contact me at the letterhead address or phone (408) 683-4330 (voice and fax).

Sincerely,

Keith R. Anderson

Keith R. Anderson
Environmental Advocate

cc: Interested Parties

3. RESPONSES TO SANTA CLARA COUNTY STREAMS FOR TOMORROW

3-1 Text has been revised based on final wetland assessment calculations in which a portion of Calabazas Creek was determined to be tidal. See revised Negative Declaration and discussion under 4.4 in the Initial Study.

3-2 Table 4 has been revised.

3-3 Text has been corrected.

3-4 Text has been expanded in response to this comment.

3-5 Table 5 has been revised.

3-6 Guadalupe Slough has been added to the discussion of steelhead trout.

3-7 Text has been clarified.

3-8 Comment does not provide a specific reference to text in the IS/MND. However, the discussion under section 4.17b does reference District mitigation requirements, and does not imply that the mitigation has been completed. The text describes the mitigation sites, status of the planning and design, and estimated completion dates.

3-9 With regards to BMP 20, the end work date has been changed to October 15, consistent with anticipated migration periods, past regulatory requirements, and start of the rainy season. With regards to the starting date, BMP 20 has been changed to not permit work before June 15. This is consistent with known migration patterns and previous requirements of the National Marine Fisheries Service, in which downstream migration typically extends through the end of May. The June 15 start date provides an additional buffer after the end of the migration season. For the proposed 2001 SMP, work will be starting after July 1. The BMP also has been revised to include Chinook salmon, and the wording has been changed to reference any work in the channel not just use of heavy equipment.

APPENDIX E

CALIFORNIA RED-LEGGED FROG SURVEY RESULTS

2001 STREAM MAINTENANCE PROJECTS
CALIFORNIA RED-LEGGED FROG SURVEY REPORT

In January 2001 the wildlife section was asked to review the proposed 2001 stream maintenance projects and identify any potential endangered species or nesting bird issues associated with the projects. Based on our knowledge of the District's watersheds, previous sensitive species surveys, reports prepared by local consultants, and the California Natural Diversity Data Base (CNDDB) we identified several streams that could have potential California red-legged frog (*Rana aurora draytonii*) (RLF) issues. These streams were located in areas that were not well surveyed, in the vicinity of known occurrences of listed species, or in areas where there have been unconfirmed reports of listed species.

In February 2001 Ms. Robin Dakin of the wildlife staff was asked to visit each of these identified sites and evaluate the habitat and potential for sensitive species. Ms. Dakin (2001) prepared a report confirming the habitat potential for sensitive species and recommending additional survey work. Only a very few sites were eliminated from further review.

This report summarizes the findings of surveys conducted during May 2001. This report should be used in conjunction with the site descriptions provided by Dakin (2001).

STUDY AREA & METHODS

Based on information contained in the January 2001 assessment and the February 2001 constraints analysis RLF surveys were scheduled in May 2001. Site visits and surveys were scheduled for seven sites throughout the county (Table 1). Surveys were conducted using the survey protocols developed by the U.S. Fish and Wildlife Service (USFWS 1997) with minor modifications. Because of safety concerns nighttime surveys on Los Gatos Creek upstream of Lincoln Avenue were not conducted. Night surveys on Rucker Creek were not conducted because the site was fully surveyed during the daytime period and there was limited access upstream and downstream of the work site. Flint Creek debris basin was surveyed in 1997 (SCVWD unpublished data) and no RLF were found. This survey updated the previous findings at the debris basin. Surveys at Coyote Creek upstream of Lower Penitencia Creek were conducted to identify any potential habitat adjacent to the site.

Table 1. Location of work sites surveyed for California red-legged frogs in 2001.

CREEK	UPPER STATION	LOWER STATION
Coyote Creek upstream of Lower Penitencia Creek confluence	455+50	454+00
Flint Debris Basin	68+00	62+00
Rucker Creek	58+30	57+30
Calabazas Creek at Quarry Road	643+30	643+00

Los Gatos Creek upstream of Lincoln Avenue	117+00	115+00
Matadero Creek at Josina Avenue	220+00	219+00
Stevens Creek at Clear Creek	500+00	467+00

Surveys were conducted by the District's wildlife and fisheries staff. Staff not familiar with RLFs were trained in identification in the office and were given field training on portions of Coyote Creek in the Palassou Ridge Natural Area upstream of Coyote Reservoir. Additional training was provided prior to conducting night surveys. Training focused on identification of local amphibians as well as techniques for conducting the surveys. Training was provided by District staff with extensive experience in the field with RLF.

RESULTS

Nineteen individual site visits/surveys were conducted between May 3 and May 21 (Table 2). No RLFs were observed on any creeks. Specific information on individual creeks is provided below.

Table 2. Survey dates and individuals conducting the California red-legged frog surveys.

Creek	Day 1	Day 2	Night 1	Night 2
Coyote Creek upstream of Lower Penitencia Creek	May 17 Doug Padley			
Flint Debris Basin	May 14 Mary-Frances Farrington Gargas	May 15 Veronica Pedro		
Rucker Creek at Guibal Road	May 8 Doug Padley Mary-Frances Farrington-Gargas	May 12, Doug Padley May 24 Doug Padley		
Calabazas Creek at Quarry Road	May 3	May 18	May 14	May 16
Los Gatos Creek upstream of Lincoln Avenue	May 4	May 10		

Matadero Creek at Josina Avenue	May 7	May 16	May 15	May 17
Stevens Creek at Clear Creek	May 9	May 22	May 15	May 21

Coyote Creek upstream of Lower Penitencia Creek

One site visit was made to Coyote Creek upstream of Lower Penitencia Creek. The erosion repair project is located in a tidal reach of Coyote Creek and no RLF are expected to occur in this reach of the creek. The surrounding lands include a plowed and disced parcel between the creek and Macarthy Ranch Road. No ponds or wetlands were observed along the access road or in the fields adjacent to the project site.

No amphibians were observed during the surveys. The project site was inhabited by large numbers of western fence lizards (*Sceloporus occidentalis*). A small gravel bar in the center of Coyote Creek was occupied by 21 Canada geese (*Branta canadensis*), 1 great blue heron (*Ardea herodius*), and 2 mallards (*Anas platyrhynchos*). Burrows of Chinese mitten crabs (*Eriocheir sinensis*) were abundant in the project vicinity.

Flint Creek Debris Basin

Two daytime surveys of Flint Creek Debris Basin and the adjacent 1900 feet of Flint Creek were conducted. The debris basin supports a small stand of coyote brush (*Baccharis pilularis*), annual grasses and a variety of trees were planted as a visual shield. Flint creek is lined with coast live oak (*Quercus agrifolia*) with English ivy (*Hedera helix*), blackberry (*Rubus* sp.), and poison oak (*Rhus diversiloba*) as the primary understory plants.

No amphibians were observed during the surveys. Wildlife observed during the surveys included mourning doves (*Zenaida macroura*), northern mockingbird (*Mimus polyglottus*), American robin (*Turdus migratorius*), house finch (*Carpodacus mexicana*), bushtit (*Psaltriparus minimus*), lesser goldfinch (*Carduelis psaltria*), western scrub jay (*Aphelocoma californica*), song sparrow (*Melospiza melodia*), California towhee (*Pipilo crissalis*) and killdeer (*Charadrius vociferus*).

Rucker Creek at Guibal Road

Three daytime surveys were conducted on Rucker Creek between Guibal Road and the Santa Clara Conduit 75 ft downstream of Guibal Road. During the first visit several large partially metamorphosed amphibian tadpoles were observed in the water column adjacent to vegetation. The size of these individuals and the changing color patterns forced us to conduct a second and subsequently a third site visit. On the third site visit we captured several individuals for a closer evaluation. Color patterns, widespread eyes extending beyond the profile of the head, and size suggests these individual tadpoles were Pacific treefrogs (*Hyla regilla*). Red-winged blackbirds (*Agelaius phoeniceus*) were observed entering and leaving the small stand of cattails at the site suggesting nests may be present on the site.

Calabazas Creek at Quarry Road

Surveys on Calabazas Creek were conducted between Comer Road and Via Regina. Two daytime surveys and two nighttime surveys were conducted. A short section of the creek between 625+00 and 640+00 was not surveyed because of private property issues. Vegetation along the creek consisted of a variety of landscaping plants mixed with valley-foothill riparian species including bigleaf maple (*Acer macrophyllum*), coast live oak, willow (*Salix* sp.), buckeye ( ), periwinkle (*vinca major*), English ivy, poison oak, and a variety of grasses.

No RLF were observed during these surveys. During the daytime surveys a variety of common foothill and suburban birds were observed along the creek including black-headed grosbeak (*Pheucticus melanocephaus*), Hutton's vireo (*Vireo huttoni*), western scrub jay, mourning dove, song sparrow, bushtit, Anna's hummingbird (*Calypte anna*), dark-eyed junco (*Junco hyemalis*), black phoebe (*Sayornis nigricans*), Nuttall's woodpecker, wrentit (*Picoides nuttallii*), spotted towhee (*Pipilo maculatus*), California towhee, oak titmouse (*Baeolophus inornatus*), warbling vireo (*Vireo gilvus*), Pacific-slope flycatcher (*Empidonax difficilis*), western wood pewee (*Contopus sordidulus*), Townsend's warbler (*Dendroica townsendi*), Bullock's oriole (*Icterus bullockii*), Bewick's wren (*Thryomanes bewickii*), orange-crowned warbler (*Vermivora celata*), house finch, northern mockingbird, California thrasher (*Toxostoma redivivum*), red-shoulder hawk (*Buteo jamaicensis*), Stellar's jay (*Cyanocitta stelleri*), western tanager (*Piranga ludovicianai*), chestnut-backed chickadee (*Poecile rufescens*), Allen's hummingbird (*Selasphorus sasin*), spotted towhee, and Cooper's hawk (*Accipiter cooperi*). Mammals observed on the surveys included black-tailed deer (*Odocoileus hemionus*), opossum (*Didelphis virginianus*). Two amphibian species were observed during the surveys: bullfrog (*Rana catesbiana*) and Pacific treefrog. No RLF were observed and no reptiles were observed.

Matadero Creek at Josina Avenue

Surveys on Matadero Creek were conducted from Alma Road to the upper end of Bol Park. Most of this reach of Matadero Creek is older urban residential. The vegetation is composed of a variety of landscaping and native plants. Coast live oak, Valley oak, buckeye, are the primary native species while coast redwood, eucalyptus, and black walnut have been planted. Understory vegetation consists of stinging nettle, poison oak, blackberry, and ivy.

No RLF were observed during these surveys. Birds observed during the surveys include: mallard, house sparrow, northern rough-winged swallow (*Stelgidopteryx serripennis*), barn swallow (*Hirundo rusticai*), house finch, American crow (*Corvus brachyrhynchos*), great egret (*Ardea alba*), oak titmouse, black phoebe, lesser goldfinch, spotted towhee, California towhee, Nuttall's woodpecker, Stellar's Jay, Pacific-slope flycatcher, bushtit, Anna's hummingbird, mourning dove, Bewick's wren, great blue heron, dark-eyed junco, Cooper's hawk, American robin, western scrub jay, Hutton's vireo, white-breasted nuthatch (*Sitta carolinensis*), brown-headed cowbird (*Molothrus ater*), chestnut-backed chickadee, red-shouldered hawk. Several fish were observed along the creek including Sacramento sucker, and California roach. Several ground squirrels were observed during the surveys but not identified. The only amphibians observed during the survey were Pacific treefrogs.

Stevens Creek at Clear Creek

Surveys on Stevens Creek were conducted between Homestead Road and McClellan Road. Vegetation along this section of creek is a mixture of sycamore-cottonwood woodland with box elder, black walnut and buckeye mixed in. Open areas in the creek contain sedges (*Scirpus* sp.), watercress and cattails (*Typha* sp.).

A wide variety of birds were observed along Stevens Creek including: mallard, bushtit, chestnut-backed chickadee, American robin, cedar waxwing (*Bombycilla cedrorum*), Hutton's vireo, Nuttall's woodpecker, belted kingfisher (*Ceryl alcyon*), lesser goldfinch, California towhee, western scrub jay, mourning dove, wrentit (*Chamaea fasciata*), song sparrow, hooded oriole (*Icterus cucullatus*), western tanager, red-shouldered hawk, western wood pewee, acorn woodpecker (*Melanerpes formicivorus*), spotted towhee, house finch, Bullock's oriole, oak titmouse, European starling (*Sturnus vulgaris*), white-breasted nuthatch, Anna's hummingbird, Bewick's wren, dark-eyed junco, warbling vireo, downy woodpecker (*Picoides pubescens*), brown-headed cowbird, and purple finch (*Carpodacus purpureus*). Several mammals were observed including squirrels, striped skunk (*Mephitis mephitis*), unidentified bats, raccoon (*Procyon lotor*) and feral cats. No reptiles were observed during the surveys and the only amphibian observed was the bullfrog. No RLF were observed on these surveys.

Los Gatos Creek upstream of Lincoln Avenue

Surveys on Los Gatos Creek were conducted during daytime hours only. This section of creek is known to be used by anadromous fish and is considered critical habitat for steelhead (*Oncoryhchus mykiss*). The vegetation along the creek includes willows, black walnut (*Juglands* sp.), box elder (*Acer negundo*), black locust, eucalyptus, pepper tree, and a variety of introduced landscape trees. The understory is composed of blackberries, poison oak, and landscape plants.

No RLF were observed during these surveys. Wildlife observed on the creek consisted mostly of birds. Lesser goldfinch, bushtit, black-headed grosbeak, house finch, American robin, chestnut-backed chickadee, black phoebe, mallard, Cassin's vireo (*Vireo cassinii*), black-crowned night-heron (*Nycticorax nycticorax*), Stellar's jay, red-tailed hawk, Nuttall's woodpecker, black-chinned hummingbird (*Archilochus alexandri*), green heron (*Butorides virescens*), Bewick's wren, great egret, California towhee, Pacific-slope flycatcher, belted kingfisher, red-shouldered hawk, western scrub jay, northern mockingbird, Allen's hummingbird, house sparrow, northern rough-winged swallow, Anna's hummingbird, brown-headed cowbird, mourning dove, warbling vireo, Cooper's hawk, bushtit, American crow, and cedar waxwings were observed. A variety of fish were observed along this stretch of the creek but were not identified. Bullfrog tadpoles were observed throughout the reach.

ASSESSMENT

Although no RLF were found during these surveys, Matadero Creek upstream of the project and survey area is known to support RLF. Pre-construction surveys should be conducted to insure no animals have move into the project area. If frogs are found during these surveys then the U.S. Fish and Wildlife Service must be contacted for instructions. Similarly pre-construction surveys of Calabazas Creek are recommended for the same reason.

Personnel working on all projects including District staff and contract staff should be made aware of the potential of RLF and western pond turtles to occur on the project sites and instructed on what actions to take if they find these species during construction. The District's pamphlets on sensitive species pertaining to these two species should be handed out to all project personnel and posted at the work site.

LITERATURE CITED

Dakin, R. 2001. Constraints Analysis for Sediment Control and Erosion Repair Projects for 2001.

USFWS. 1997. Guidance on Site Assessment and Field Surveys for California Red-legged Frog

a:maintenance 2001proj.files\reports\2001maint-frog2.wpd